ELECTRICAL WHOLESALING

MARCH · 1952
A McGRAW-HILL PUBLICATION
PRICE 35 CENTS

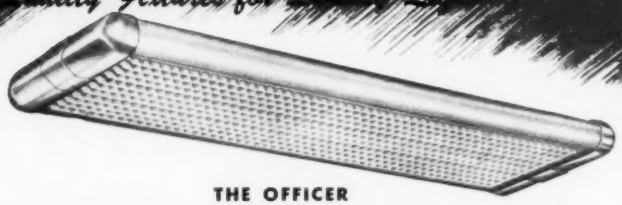
THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

WHOLESALER'S SALESMAN HULTGREN (LEFT) DISCUSSES PROBLEM OF OBTAINING REPAIR PARTS FOR A CONTRACTOR CUSTOMER

Helping Contractors Meet Today's Problems (See page 49)

A BETTER FIXTURE FOR EVERY LIGHTING NEED...from

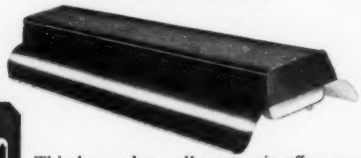
Leader



THE OFFICER

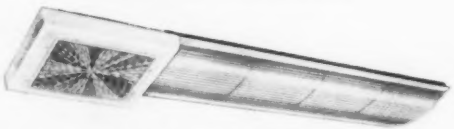
America's finest fluorescent fixture for interiors of distinction. Streamlined and gracefully proportioned. Translucent plastic side panels, one-piece injection moulded plastic louver with choice of 31° or 45° shielding. For two, three or four 40-watt lamps, or Slimline lamps in lengths from 48" to 96".

THE STRATOLINER



This heavy-duty, all-steel unit offers everything desired in an industrial fixture. Durable, strongly built, neat in appearance, easily serviced. Reflector finished in baked enamel or porcelain enamel (RLM approved). Available in open or closed end style for two or three 40-watt lamps, or two 85-watt lamps.

RECESSED TROFFERLITE



Leader troffer fixtures offer versatility of lighting design and high light values. Shown here with matching incandescent spotlight. Trofferlites are available with a wide variety of glass or specialized lenses, also in louvered, baffled and open styles. Complete range of lengths, choice of regular or shallow depth, 12" or 24" width, for from two to eight lamps.

Sold and installed by the better electrical dealers and contractors

Leader America's No. 1 Lighting Equipment Manufacturer

LEADER ELECTRIC COMPANY • 3500 North Kedzie Avenue • Chicago 18, Illinois

Leader Electric—Western: 800 One Hundredth Avenue, Oakland 3, California

Campbell—Leader, Ltd.: Brantford, Ontario, Canada

Because you use *the same* **"ECONOMY** *De-Lay"* Cartridge over and over again.

You renew a "blown" **ECONOMY** *Fuse* by simply inserting an inexpensive "ECONOMY DE-LAY" *Renewal Fuse Link* in the old Cartridge.

You reduce "lights out" and "machine down time" because **"ECONOMY** *De-Lay" Fuse Links* are replaced in a few seconds.

Your investment in **"ECONOMY** *De-Lay" Fuse Links is much smaller than the investment required* if you use non-Renewable Fuses for each fuse replacement.

Ask for the ECONOMY *Catalog and Price List.*

5871EW

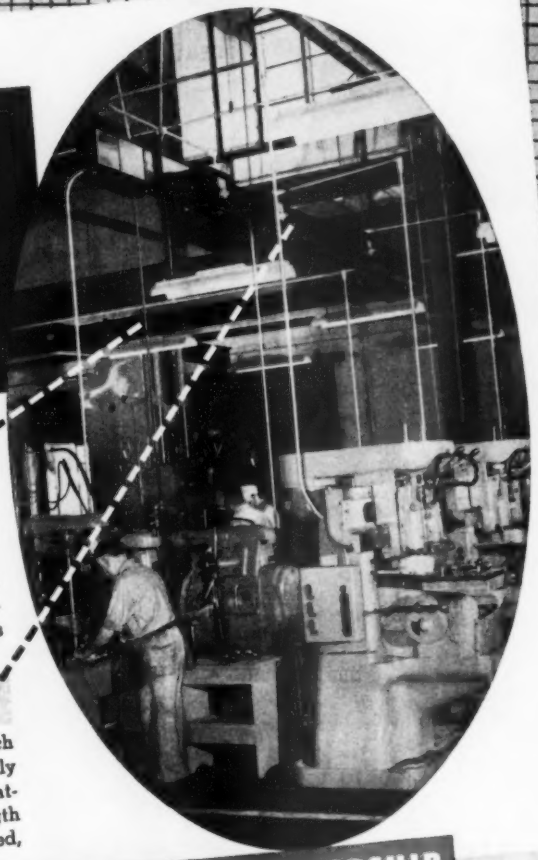
Your Electrical Wholesaler has "ECONOMY DE-LAY" Renewable Fuses and Renewal Links in stock.

ECONOMY FUSE AND MFG. CO., 2717 GREENVIEW AVE., CHICAGO 14, ILLINOIS REPRESENTATIVES IN ALL PRINCIPAL CITIES

ELECTRICAL WHOLESALERS—It's ECONOMY for you, too, when you "save" sales and profits that might otherwise be lost, by carrying an ample stock always of "ECONOMY DE-LAY" Renewable Fuses and Renewal Links.

for time-saving, money-saving

POWER DISTRIBUTION



SQUARE D FEED-IN DUCT

is the most efficient way to transmit large amounts of power. It provides the lowest known voltage drop—only 1.8 volts per 1000 amperes per 100 feet.

Exclusive design requires no ventilation—permits a totally enclosed, compact, dust-excluding enclosure. Rigid construction provides high resistance to heavy electrical stresses.

SQUARE D PLUG-IN DUCT

provides flexible power distribution for branch circuits. Machinery can be rearranged quickly at minimum cost. Plug-in units can be attached at frequent intervals along the length of the duct, providing power where it's needed, when it's needed.

BUSWAY FEATURES PROVE DESIGN LEADERSHIP

NEW JOINT DESIGN. Feed-in Duct joint design saves installation time and reduces maintenance cost. Duct ends are identical—unnecessary to select mating ends before positioning or hanging duct sections. Outward-facing, pre-installed bolts permit rapid assembly and easy maintenance.

ROUND BUS BARS for Plug-in Duct provide greater mechanical strength and resistance to short-circuit stresses. Circuit breaker or fusible type plug-in units are easily installed at 2-foot intervals along both sides of the duct. Plug-in stabs grip the round bus bars with exceptionally high pressure.

FLEXIBLE CONNECTORS of laminated copper join bus bars between sections—permit proper alignment, insure tight joints and provide for expansion and contraction at Plug-in duct joints. All bolt heads face outward for greater accessibility.

SQUARE D COMPANY

DETROIT · MILWAUKEE · LOS ANGELES

SQUARE D COMPANY CANADA LTD., TORONTO • SQUARE D de MEXICO, S.A., MEXICO CITY, D.F.

ARTHUR W. HOOPER
Editor

G. Ganzenmuller
Managing Editor

R. Collura
Assistant Editor

A. Denniston
Assistant Editor

T. F. Preston
Assistant Editor

R. C. Woodhouse
Assistant Editor

H. J. Emerson
Pacific Coast Editor

H. Phillips
Art Director

W. W. GAREY
Publisher

District Representatives
A. B. Conklin
S. A. Jones
New York
Charles F. Minor, Jr.
R. R. Ream
Chicago
Charles B. Shaw
Cleveland
A. M. Sansen, Jr.
Philadelphia
John W. Otterson
San Francisco
J. H. Allen
Los Angeles
Ralph C. Maultsby
Atlanta, Ga.
James Cash
Dallas, Texas

ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

A McGraw-Hill Publication

CONTENTS **MARCH, 1952**

Washington Straws		33
Times and Trends	Arthur W. Hooper	39
Business Index—Sales and Inventories; Regional Analysis		41 and 42
Pointing The Way to Continuing Prosperity	An Editorial	45
Helping Contractors Meet Today's Problems	Howard J. Emerson	49
An Insight Into Your 1952-55 Industrial Market		57
Prepare For Progress and Success Will Follow—Part III		58
Buyer Resistance Is No Stone Wall	Edmund Mottershead	59
Don't Overlook Sales To Small Business		62
Condensed Selling Data For Twelve Fan Markets		64
They Sell Fans For All-Year Use	Thomas F. Preston	66
1952 Fan and Ventilating Equipment Specifications		68
Hundreds of Home Builders See Lighting Recipes		106
Packaged Light and Sound Conditioning		109
S.E.W.A. Sees Few Clouds on Sales Horizon	E. Dalton White	110
DPA News Digest		119
Camaraderie In Chicago		120
Adequate Wiring Standards Can Be Met in Small Homes		122
New Products		124
Silent Salesmen Sell Plenty		129
News Notes From N.A.E.D.	William C. Pirie	130
News Of The Industry		115 and 136

March, 1952 ELECTRICAL WHOLESALING (with Wholesaler's Salesman) Vol. 33, No. 3

Member ABC and ABP

Published monthly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder. Publication Office, 1309 Noble Street, Philadelphia 23, Pa.

Executive Editorial and Advertising Offices: McGraw-Hill Building, 330 West 42nd St., New York 36, N. Y. Curtis W. McGraw, President; Willard Chevalier, Executive Vice-President; Joseph A. Gerardi, Vice-President and Treasurer; John J. Cooke, Secretary; Paul Montgomery, Senior Vice-President, Publications Division; Ralph B. Smith, Editorial Director; Nelson Bond, Vice-President and Director of Advertising; J. E. Blackburn, Jr., Vice President and Director of Circulation.

Subscriptions: Address correspondence to Electrical Wholesaling—Subscription Service, 330 West 42nd St., New York 36, N. Y. Allow at least ten days for change of address.

Please indicate position and company connection on all subscription orders.

Single copies, 35c.; 70c. a copy for special issues. Subscription rates—United States and possessions, $3.00 for one year; $4.00 for two years; $5.00 for three years. Canada, $5.00 for one year; $8.00 for two years; $10.00 for three years. All other countries, $15.00 for one year; $25.00 for two years; $30.00 for three years. Entered as second class matter August 31, 1948, at the Post Office at Chicago, Ill., under the Act of March 3, 1879, pending transfer as second class matter to the Philadelphia, Pa., Post Office. Cable address: "McGraw-Hill New York." Printed in U. S. A.
Copyright 1952 by McGraw-Hill Publishing Co., Inc.—All rights reserved.

BRANCH OFFICES: 520 North Michigan Ave., Chicago 11; Post Street, San Francisco 4; 1111 Wilshire Blvd., Los Angeles 17, Calif.; Aldwych House, Aldwych, London, W.C.2; Washington 4: 17th and Sansom Sts., Philadelphia 3; 708-9 Oliver Bldg., Pittsburgh; Cleveland 16; Detroit 26; St. Louis 8; Boston 16; 1321 Rhodes-Haverty Bldg., Atlanta 3, Ga.; First Nat'l Bank Bldg., Dallas 1, Texas.

COMING NEXT MONTH

● "You Get What You Pay For"—an analysis of the cut-price selling problem as it affects your sales of lighting fixtures and appliances immediately and over a long period.

● A handbook featuring many new products, merchandising programs and literature that will be presented at the 4th International Lighting Exposition at Cleveland May 6-9.

● The fourth in a series of sales training articles. How to close the sale is the subject, which will be handled in three parts:

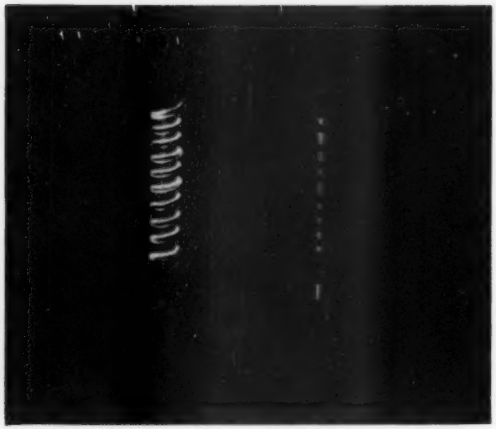
- Many sales can be closed if you ask for the order.
- Close sales by getting on the same side of the fence with your customers.
- Logic as well as emotion help close sales.

● A special section devoted to selling electric housewares on the basis of the 1952 NEMA "First Choice for Every Gift Occasion" campaign and how distributors are capitalizing on this program.

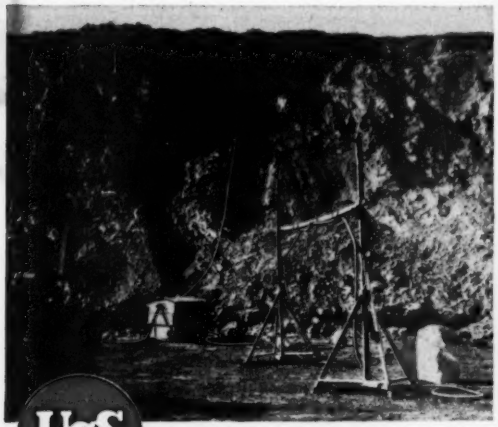
the spike test proves it!

PS Shielding*

American PS Shielded Cables are perfect for aerial lines. Tree trimming is practically eliminated. Corona troubles vanish . . . along with television and radio interference.



Here's a good example of the way PS Shielding prevents corona formation. The conductor on the left is insulated with unshielded "ozone-proof" rubber. But the PS Shielded Cable on the right is completely free from corona.



USS

PS Shielding is so flexible, light and small, that it is easy to manhandle over support rigs in the most rugged country.

PS Shielding provides an extra margin of safety when cable must be dragged over sharp rock and when it must be handled by workers.

UNITED STATES STEEL

by itself is a safety measure

***an original development of American Steel & Wire Division**

● There's an easy way to prove the effectiveness of PS Shielding. Just drive a spike through the PS conducting rubber tape into the copper conductor *without touching the ground wires.* Your breakers will trip every time, proving that PS Shielding *alone* is an outstanding safety measure for the protection of all who handle your cable.

Naturally, the PS grounded tapes can't carry heavy currents, so they're usually used in combination with ground wires. But PS Shielding will easily handle the circumferential current of the cable. In other words, it will do everything that metallic shielding will do *with these added advantages:*

Prevents Corona Discharge—PS Shielding is so flexible that it never pulls away from the insulation. This is in sharp contrast to metallic shielding which often separates from the insulation when the cable is bent. Each of the resulting gaps is a serious danger point since it may cause spark discharge plus the inevitable corona and ozone formation.

Easy to Splice—PS Shielding is available in rolls. For most splices you can apply your shielding to the splice just like ordinary insulating tape.

Reduces Bulk—PS Shielding has less bulk and weight than metallic shielding. Consequently, the cables are lighter, smaller, and in general—easier to handle.

Increases Cable Life—PS Shielding is so smooth and pliable that it won't chafe the insulation or jacket. There are no fine wires to break when the cable undergoes hard usage.

For the full story on PS Shielded Cables, get in touch with your nearest American Steel & Wire Division office.

AMERICAN STEEL & WIRE DIVISION, UNITED STATES STEEL COMPANY
GENERAL OFFICES, CLEVELAND, OHIO

COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO, PACIFIC COAST DISTRIBUTORS • TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA., SOUTHERN DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

U·S·S American Electrical Wire & Cable

UNITED STATES STEEL

Here are the Answers to the most frequently asked questions about the RLM LABEL

Q **What do the initials RLM stand for?**

A The "R" stands for Reflector, the "L" for Lighting equipment and the "M" for Manufacturers—*Reflector* and *Lighting Equipment Manufacturers.*

Q **What does the RLM Label stand for?**

A The label affixed to a lighting unit certifies that the reflector meets the minimum specification and performance standards, determined and established by the RLM Standards Institute.

Q **Who sponsors the RLM Standards Institute?**

A Incorporated as a non-profit organization, the Institute is sponsored by 24 manufacturers who voluntarily elect to manufacture industrial lighting equipment in accordance with RLM Standard Specifications.

Q **How are RLM Standard Specifications established?**

A The RLM Technical Committee, with the counsel of outstanding illuminating engineers, continuously reviews present specifications and suggests improvements and prepares new specifications. The Committee's recommendations then are reviewed by the Board of Trustees and finally submitted to the Institute Members for ratification. The adoption of new specifications requires approval by at least 80% of the membership.

Q **How does the RLM Label assure conformance to RLM Standards?**

A Representatives of the Electrical Testing Laboratories periodically visit the plants of all manufacturers participating in the RLM Specification-Certification Program. These ETL inspectors are authorized to take lighting units right off the assembly line or out of stock at random and make the required tests. They may also obtain test samples direct from distributors' stocks in order to check conformance to RLM minimum standards.

Q **Who are the Electrical Testing Laboratories?**

A Electrical Testing Laboratories, Inc., 2 East End Ave., New York 21, N. Y., is an independent testing organization which has conspicuously served industry for over 50 years. With this impartial and scientific organization rests the sole responsibility of determining whether or not an industrial lighting unit measures up to every individual quality standard that qualifies it to bear the RLM Label.

Q **What are the 4 Basic Tests made by Electrical Testing Laboratories?**

A (1) Quality of reflecting surface, (2) Reflection factor, (3) Shielding angle and reflector dimensions, and (4) Photometric test for light distribution and efficiency.

Q **In addition to design and construction features that meet certain minimum standards, what else does the RLM Label assure the buyer?**

A It provides the buyer with a warranty of uniform quality. In addition to the periodical inspections and tests made by the Electrical Testing Laboratories, the manufacturer warrants that every unit shipped by him meets the published specifications of the Institute.

Q **How many different types and sizes of RLM Units are there?**

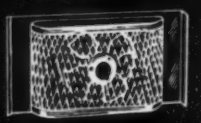
A There are 18 basic types of RLM Units and 34 different sizes made by one or more of the 24 member-manufacturers. At present there is available a total of over 250 different makes and types of units which either bear the RLM Label or are on submittal for testing and certification at Electrical Testing Laboratories.

Q **How may I obtain free copies of all existing RLM Specifications and a check list of RLM-Member Manufacturers?**

A Send for the 44-page RLM Specifications Booklet and the new RLM Bulletin 1050. Write RLM Standards Institute, Suite 817, 326 W. Madison St., Chicago 6, Ill. Your copies will be mailed gladly without cost or obligation.

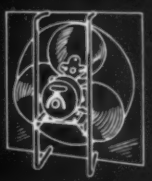
R·L·M STANDARDS INSTITUTE
INCORPORATED
The letters RLM stand for Reflector and Lighting Equipment Manufacturers

R-5370R



WINDOW FANS

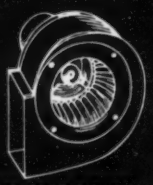
ATTIC FANS



EXHAUST FANS

PEDASTAL FANS

COUNTER FANS



DIRECT DRIVE BLOWERS

BELTED BLOWERS

SPRAY BOOTH FANS

a complete line of fans and blowers

HIGHEST QUALITY BUT PRICED TO SELL

prompt delivery

STANDARD ELECTRIC

GOLD RIBBON FANS

send for complete information

STANDARD ELECTRIC MFG. CO., INC.

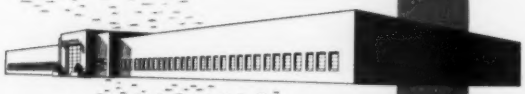
WEST BERLIN, NEW JERSEY

long lived

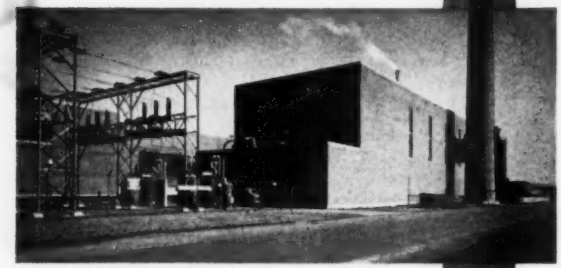
KEYSTONE-HAZAPRENE CABLES

selected for: | UNDERGROUND PRIMARY CIRCUITS CONTROL CIRCUITS

at YALE & TOWNE'S new Philadelphia Plant



From this 34.5 KV substation, Keystone-Hazaprene 5 KV Cables serve as underground primaries carrying the 2400 volt, 3 phase current to the main switchboard in the boilerhouse.



Keystone-Hazaprene 600 volt control cables operate from the switchboard in this boilerhouse, underground to the 4 substations that supply current to the equipment manufacturing famous Yale and Towne lift trucks and machine tools.

An excellent example of modern design and construction, the new Yale and Towne Plant in Philadelphia is typical of current industrial building... here you'll find Keystone-Hazaprene Cables. Like new plants, cables are an investment, and Keystone-Hazaprene pays off with the premium performance and long, maintenance-free service that means long term economy.

For high voltage circuits, Hazard's Keystone Insulation effectively combines in one oil-base compound remarkable resistance to ozone, heat, and moisture. Protected with a Hazaprene sheath—a tough Hazard-developed neoprene compound that resists abrasion, oil, moisture and chemicals—Keystone-Hazaprene Cable assures the long, reliable service that reduces operating costs.

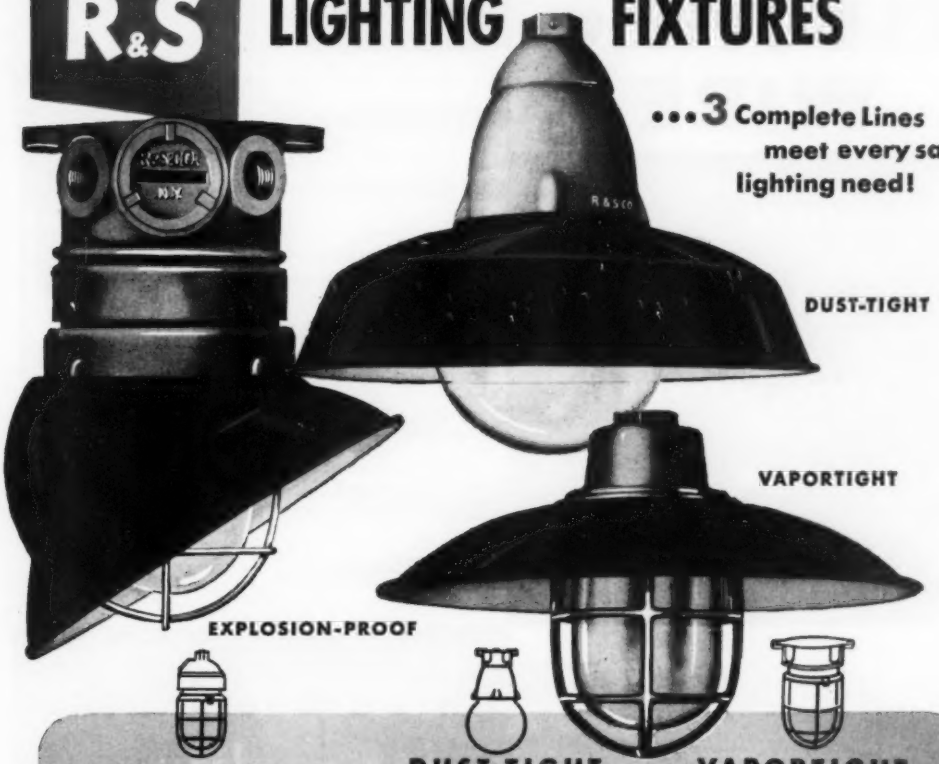
In planning new plants or circuit expansion, you'll find Hazard's engineering staff helpful in selecting proper wires and cables. Over 50 years of manufacturing and service experience provides a solid background of research-tested, field-proven data covering every type of installation. This assistance is available without obligation. Hazard Insulated Wire Works, Division of The Okonite Company, Wilkes-Barre, Pa.

HAZARD

R&S

Industrial LIGHTING FIXTURES

• • • 3 Complete Lines meet every safety lighting need!



EXPLOSION PROOF

CLASS I, GROUPS C & D

For greater safety in hazardous locations wherever flammable materials are made or used. A complete line is available in pendent, ceiling, bracket and hand types — from 100 Watts through 500 Watt sizes. Standard conduit bases permit interchangeability of reflector globe assemblies.

WRITE FOR CATALOG No. H-47-81

DUST-TIGHT

CLASS II, GROUPS E, F & G AND CLASS III

For hazardous locations where flammable or explosive dusts are present. Streamlined design prevents dangerous accumulation of dust particles. Two exclusive design features facilitate easy cleaning and relamping. Standard pendent and junction box bases accommodate any style of fixture — globe — assembly interchangeably in either 100 Watt or 200 Watt sizes.

WRITE FOR DATA SHEET No. 7151-81

VAPORTIGHT

For efficient illumination and maximum indoor and outdoor protection against non-inflammable gases, vapors, dusts and moisture. A complete line available in pendent, ceiling and bracket types from 15 Watts through 500 Watt sizes. Bases remain vaportight when globes are removed or broken in service.

WRITE FOR CATALOG No. 9048-81

50 ANNIVERSARY 1902-1952

R&S also makes a complete line of marine fixtures and fittings

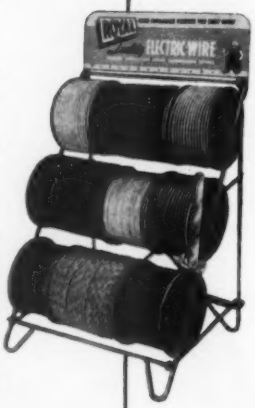
RUSSELL & STOLL COMPANY, INC. • 125 BARCLAY STREET, NEW YORK 7, N.Y. D-8

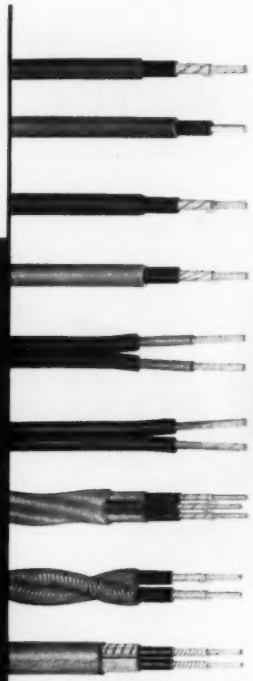
RUSSELL & STOLL

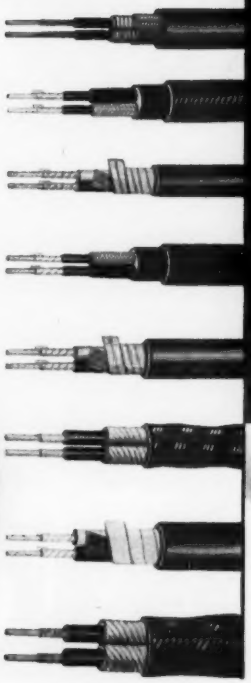
PRECISION-BUILT ELECTRICAL EQUIPMENT—SINCE 1902

ROYAL ELECTRIC WIRE

has earned
the confidence
of users everywhere
by uniform
DEPENDABILITY







BUY IT
for quality...
SELL IT
for profit!

ROYAL

thru wholesalers

Quality ELECTRIC WIRES
FUSES • WIRING DEVICES
CORD SETS • TROUBLE-LITES
CHRISTMAS LIGHTING

ROYAL ELECTRIC CO., Inc. • PAWTUCKET, R. I.

TODAY'S AD IS TOMORROW'S BUSINESS... and we're running these ads to assure quicker, easier Spang-Central Conduit sales for you.

SPANG CENTRAL CONDUIT

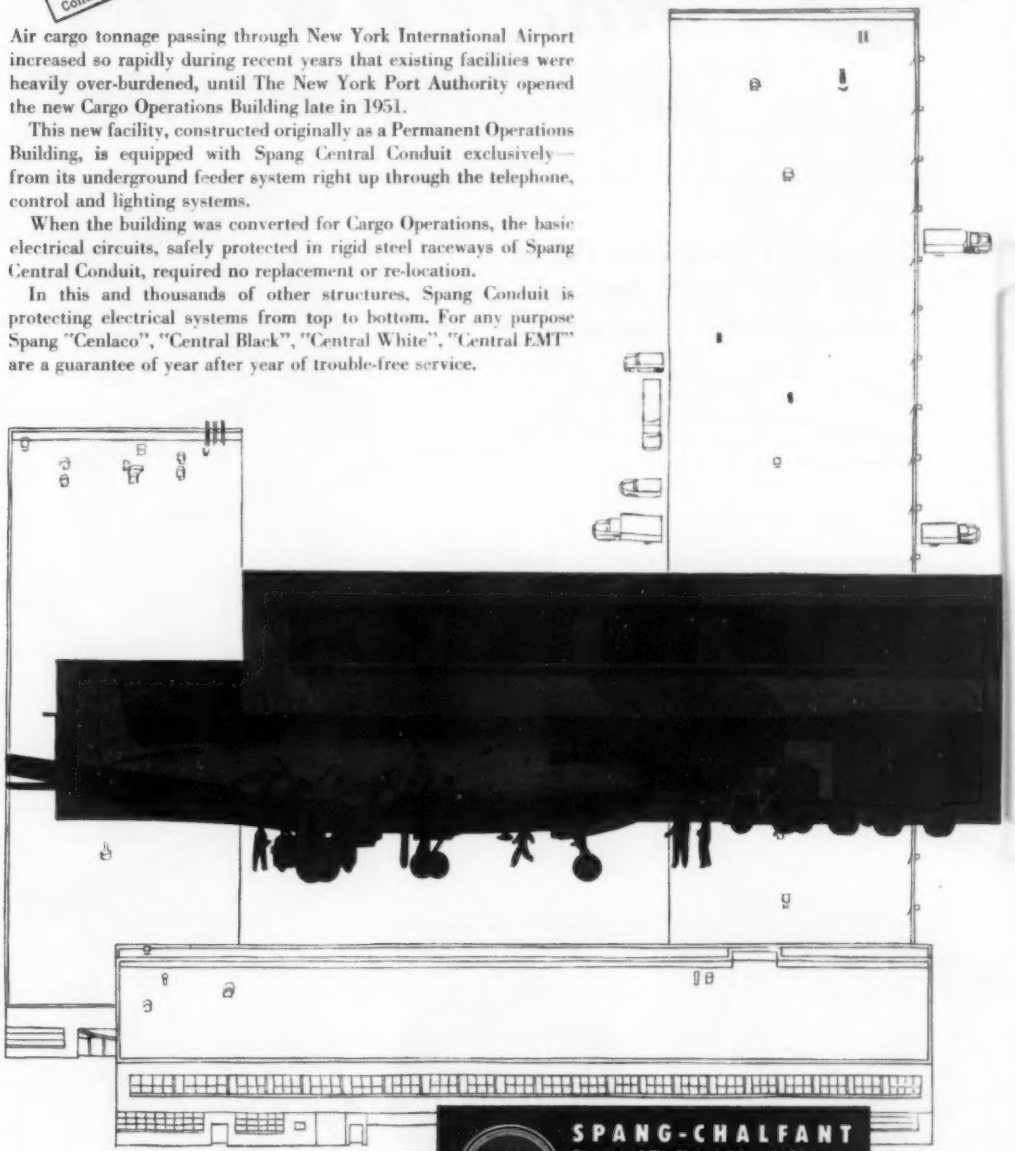
serves IDLEWILD'S newly completed air freight terminal

Air cargo tonnage passing through New York International Airport increased so rapidly during recent years that existing facilities were heavily over-burdened, until The New York Port Authority opened the new Cargo Operations Building late in 1951.

This new facility, constructed originally as a Permanent Operations Building, is equipped with Spang Central Conduit exclusively—from its underground feeder system right up through the telephone, control and lighting systems.

When the building was converted for Cargo Operations, the basic electrical circuits, safely protected in rigid steel raceways of Spang Central Conduit, required no replacement or re-location.

In this and thousands of other structures, Spang Conduit is protecting electrical systems from top to bottom. For any purpose Spang "Cenlaco", "Central Black", "Central White", "Central EMT" are a guarantee of year after year of trouble-free service.



Owner: The Port of New York Authority.
Architects: Lorimer and Rose, New York.
General Contractor: Corbetta Construction Co., New York.
Electrical Contractor: Johnson Electrical Corporation, New York.

SPANG-CHALFANT
Division of The National Supply Company
GENERAL SALES OFFICE:
GRANT BUILDING, PITTSBURGH 30, PA.
District Offices and Sales Representatives in Principal Cities

3 REASONS WHY YOUR SHOULD HIT NEW HIGHS

Sylvania Fluorescent Tubes and Light Bulbs backed by powerful programs

The story of Sylvania's outstanding quality has caught on everywhere. And now, we're pushing that advantage with bigger-than-ever, nation-wide campaigns to build record Sylvania sales for every wholesaler and retailer.

Ads in *Time, Business Week, Newsweek,* and other important magazines are pounding home the superiority of Sylvania Fluorescent Tubes with a challenging, money-back guarantee. In addition, full pages in *The Saturday Evening Post, This Week,* and *American Weekly* will sell Sylvania Products to millions.

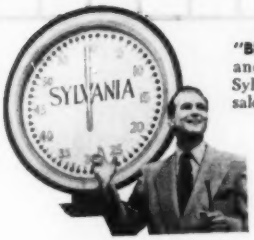
1 Big Smashing National Ads

Urge all Contractors to join the Qualified Lighting Contractor campaign and display this sign *prominently!*

LIGHTING CONTRACTOR

SYLVANIA

SYLVANIA SALES
THIS SPRING!



"BEAT THE CLOCK" . . . featuring Roxanne and Bud Collyer will continue to win Sylvania Customers . . . build bigger Sylvania sales records.

3 Fascinating Unique, Premium Offer

THE MAGIC WINDOW WASHER . . . is a work-saver that women really go for. Nationally advertised in Good Housekeeping, this premium assures extra light-bulb sales without extra effort

2 The Weekly CBS-TV Programs

COLORFUL, "POINT-OF-SALE" MATERIAL TOO . . . plenty of it! Below are bright posters and streamers . . . **FREE** with every Sylvania order to keep Sylvania Light Bulbs moving FAST!

Only **25¢** and the end of a Sylvania 4-Pack

FOR THE BEST fluorescent tube and light bulb business you have ever known, be sure to cooperate with Sylvania NOW! For full details about how and why, write today to: Sylvania Electric Products Inc., Dept. L-3203, 1740 Broadway, New York 19, N. Y.

SYLVANIA

FLUORESCENT TUBES, SIGN TUBING, FIXTURES, WIRING DEVICES; LIGHT BULBS; RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; PHOTOLAMPS; TELEVISION SETS

General

MEETS THE TEST!

A GENERAL PULLOUT WAS HAND-OPERATED 10,000 TIMES WITHOUT A BREAKDOWN!

An independent, impartial laboratory subjected a General pullout to this strenuous test. It passed, surpassed itself.

10,000 COMPLETE CYCLES IS A LOT OF EFFICIENCY!

Every General product is designed to meet these difficult performance requirements. It is one of the many important reasons why you can fully rely on General — for years of maintenance-free usage . . . for unquestionable quality . . . tough construction that can withstand *any* test.

Next time, make sure it's a General — It's been tried and proved *before* you use it!

LOOK FOR THESE FEATURES!

• Trims quickly removed with new single screw assembly • More spacious wiring area • Varied and plentiful knockouts • Extra solderless connectors on bus assembly for "tap-off" • Ample contact area carries rated load without undue voltage drop • Electrolitically pure copper contacts • Improved heat dissipation keeps mechanism cooler • Large pullout handle any housewife can operate • All pullouts have flush mounting ears.

General Switch Corp.
49 Rambling Street Brooklyn 11, N. Y.

"the switch is to General"

General's complete line of Single — Double — Triple and Quadruple pullouts are manufactured in all popular combinations.

WRITE FOR CAT. #3201

ENCLOSED SAFETY SWITCHES • SERVICE ENTRANCE-EQUIPMENT • BRANCH CIRCUIT PANELS

Tested and approved
—FOR SAFETY AND DEPENDABILITY BEYOND SPECIFICATION

CHESTER
plasticord-plasticote
WIRES and CABLES

JAN-C-76 APPROVED WIRES
80°—90°—105°C HOOK-UP WIRE
SHIELDED WIRE AND CABLE
FLEXIBLE CORDS
COAXIAL CABLE
TELEVISION LEAD IN CABLE
GAS TUBE HIGH TENSION CABLE
OIL BURNER IGNITION CABLE
BLASTING WIRE
THERMOSTAT CABLE
BELL AND OFFICE WIRE
TW BUILDING AND FIXTURE WIRE

CHESTER makes them all!

All Chester wire and cable features the extra dependability, long service life and easier working qualities of plastic insulation. Their tough, impervious plastic coats provide maximum immunity to abrasion, weather, oil and most chemicals. They are smooth, pull through conduit with minimum effort and present a fine appearance in exposed locations.

There's a Chester single or multi-conductor wire or cable for practically every indoor or outdoor requirement including many special constructions for the electrical, electronic, TV, radio, telephone and other industries. Why not write today for full information?

"Chesty" says—

Write today for your free copy of the Chester Wire and Cable catalog. A complete guide to plastic covered wire and cable for every electronic and electrical application. Please address inquiries on company letterhead.

CHESTER CABLE CORP.
CHESTER, NEW YORK

MANUFACTURERS OF QUALITY WIRE AND CABLE FOR EVERY ELECTRICAL AND ELECTRONIC REQUIREMENT

STEEL CITY ELECTRIC CO.

WITH

KINDORF DEVICES

Can Now

Meet Contractors' Needs

for

HANGERS — SUPPORTS FOR PIPE — CONDUIT

These modern and time-saving Kindorf Devices are fitting companions for

Steel City Electrical Boxes and Conduit Fittings

that have been the choice of quality-conscious contractors for almost fifty years

Conduit at RIGHT ANGLE

Conduit PARALLEL

By designing its products to do BEST the jobs for which they are intended
—providing helpful service of experienced representatives
—and selling through the most reputable wholesalers

Steel City Leads In Meeting Contractors' Needs

STEEL CITY ELECTRIC COMPANY

[illegible] COLUMBUS AVENUE [illegible] PITTSBURGH 33, PENNA.

Above: Recessed Troffer with GRATELITE

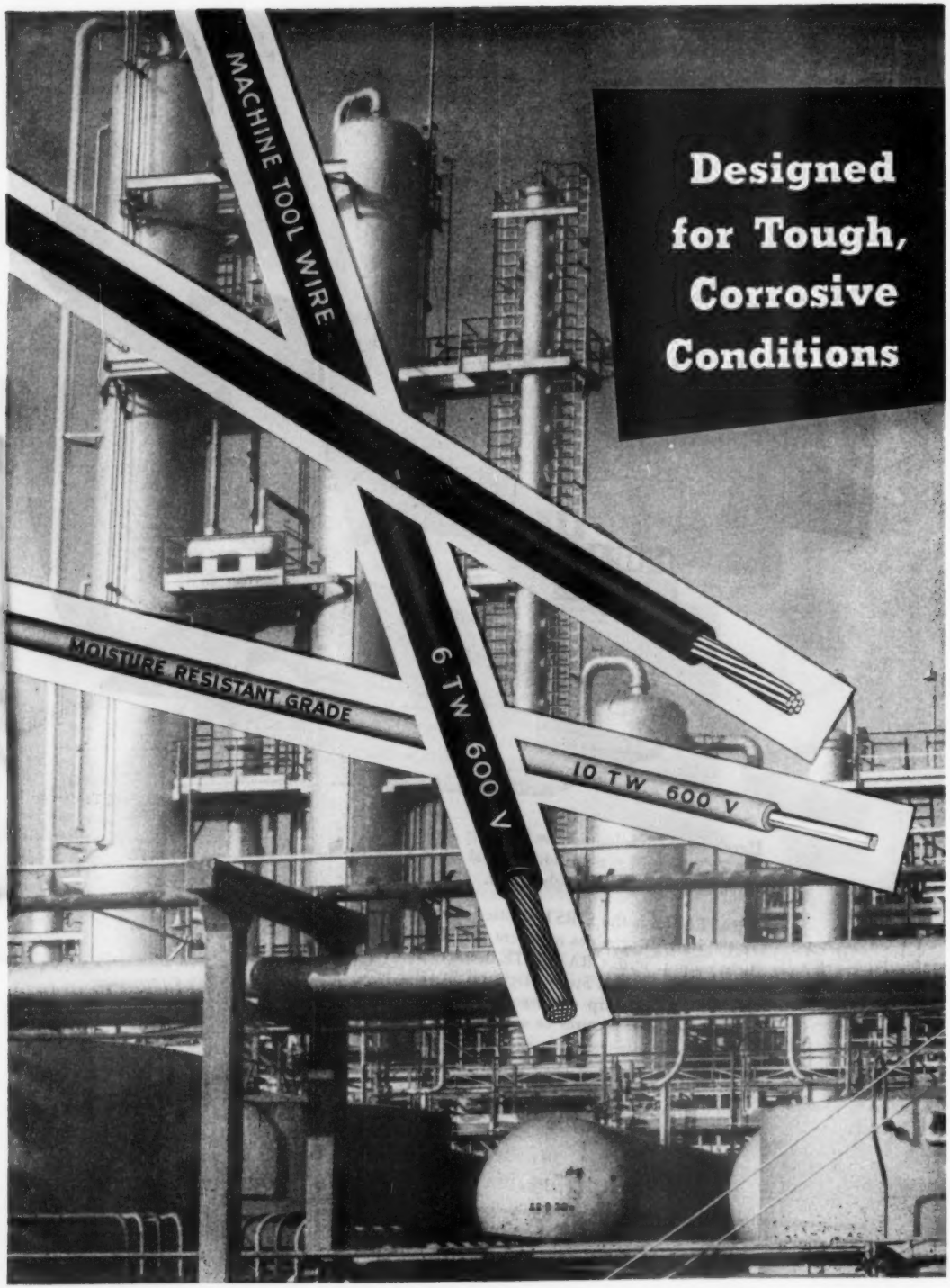
Below: New Futurliter with GRATELITE

Here's a new development in lighting: A plastic louvre with 45° x 45° cut off for efficient vertical illumination and low brightness diffusion at high angles.

GRATELITE is the FIRST plastic louvre made in sizes up to 48" long. It provides excellent shielding with maximum light output. With GRATELITE, fixtures and surroundings are more attractive. Strong, lightweight GRATELITES are durable; won't warp or discolor. Easy to clean. Easy to install on single fixtures or complete ceilings. Available in opaque or transparent densities.

For complete information, contact your nearest GUTH resident engineer today.

THE EDWIN F. GUTH COMPANY / ST. LOUIS 3, MO.


MACHINE TOOL WIRE
Designed for Tough, Corrosive Conditions
MOISTURE RESISTANT GRADE
6 TW 600 V
10 TW 600 V

Rome Synthinol®

WIRES AND CABLES

Whenever you are selling or installing plant wiring, you'll find Rome Synthinol thermoplastic insulated wires and cables are sure to build your reputation for handling quality products. They are manufactured to withstand tough, corrosive conditions like those encountered in the chemical or petroleum industries.

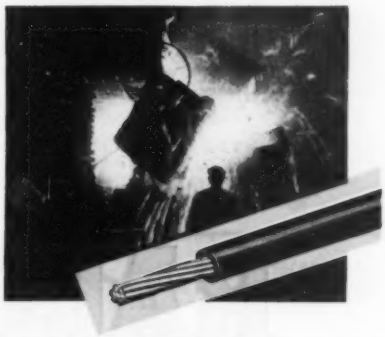
This rugged, polyvinyl chloride type insulation has proven its ability to resist acids, moisture, abrasions, corrosive fumes, flame, oils and cutting solutions. Colors remain permanently clear for quick, easy circuit identification.

What's more, Rome Synthinol assures quick, easy, economical installation. Its lubricated surface makes it easy to pull. It's easy to strip, too. And, its small diameter, high dielectric strength and exceptional aging characteristics make it ideal for industrial wiring circuits.

Rome Synthinol, Type TW small diameter building wire is approved by the Underwriters' Laboratories for use in wet locations under the rules of the National Electrical Code.

Rome Synthinol Machine Tool and Control Wire has been adopted as standard wiring material by machine tool manufacturers for extreme durability and excellent resistance to heat, oils, acids, alkalies, common cutting solvents, etc. Underwriters' Laboratories approved as Type TW, with end use approval for 80° C. operation in air; 60° C. where exposed to oil and in wet locations. Conforms with National Machine Tool Builders' Assoc. Standards.

For Steel Mills, Chemical Plants, Oil Refineries and Other "Hot Spots" . . . Rome Synthinol 901
Here's the ideal insulation for the equipment wiring of steel mills, chemical plants, oil refineries and other "hot spots." A resin plasticized polyvinyl chloride type of insulation, Rome Synthinol 901 provides superior service life under high operating temperatures. It also offers high resistance to oils and chemicals. It is Underwriters approved for 600 volts at 90° C., when used as an appliance lead wire.



Copper wire mill products are a Controlled Material under N.P.A. Controlled Materials Plan . . . USE YOUR CMP ALLOTMENT

It Costs Less To Buy the Best

ROME CABLE
Corporation
ROME · NEW YORK
and
TORRANCE · CALIFORNIA

ROME CABLE ROME, N.Y.

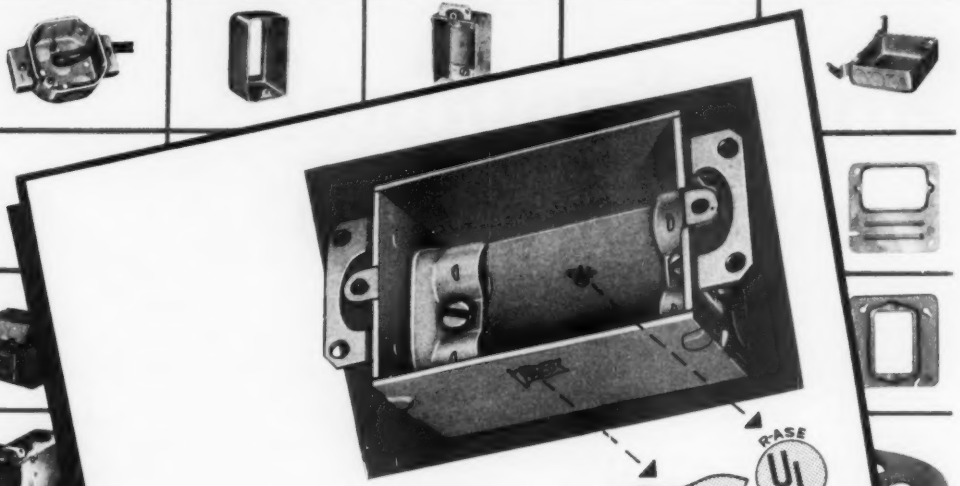
ROME CABLE CORP., Dept. WH-3 Rome, N. Y.
Please send me the Rome Synthinol Bulletin 101.

Name.....

Company.....

Address.....

City.....*State*.....



What these two signs mean to YOU

The sign of the Underwriters' Laboratories "U-L" stamped on an electrical box means that it has passed the exacting safety examination of that organization and thus will meet the requirements of your local building code. The RACO emblem on a box means that it was designed and is constantly improved to make installation faster, easier, and permanent. This well-known trade-mark on box materials is your assurance that they are adaptable to all wiring needs . . . are handy to use . . . are recognized by architects, engineers, and builders everywhere . . . and are available nation-wide. Look for these two signs . . . insist on them!

You can always rely on RACO

RACO

ALL-STEEL EQUIPMENT Inc.—800 Kensington Ave., Aurora, Illinois

"A BOX FOR EVERY NEED"

See this New G-E "500" lamp merchandiser at the Toy Fair!

Jobbers like it—Dealers want it!

This colorful counter merchandiser, recently developed by General Electric, is factory-packed with 500 G-E Christmas Tree bulbs in the new, assorted-color 10-lamp packages that speed sales and need no wrapping. Knockouts permit adding a string of lamps for a lighted display.

Stock is pre-selected according to normal dealer needs. Display "sells up", for most customers buy 10-lamp packages, but convenient drawer permits display of individual bulbs. Lamps list at $68.02, tax included—high profit for 24-in. space.

Assured Demand—Sales of G-E Christmas Tree Lamps will be backed by a big G-E advertising program.

Preferred—Long experience with the benefits of G-E Research makes customers ask for G-E Lamps.

JOBBERS *LIKE* IT BECAUSE:
- Saves warehouse space
- Reduces handling
- Fewer broken package shipments
- Salesmen's "volume" order

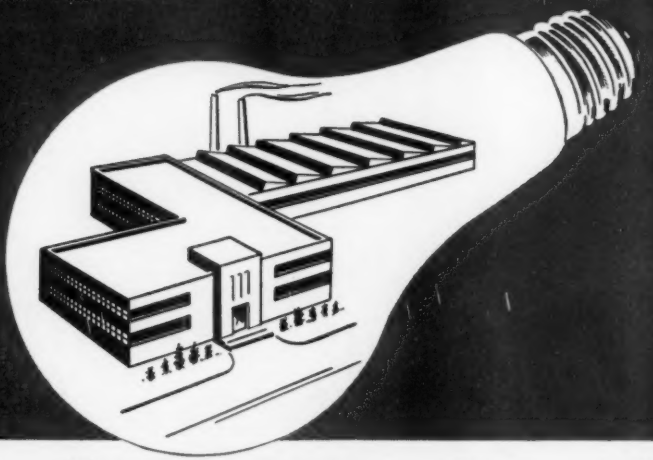
DEALERS *WANT* IT BECAUSE:
- Attracts attention!
- More 10-lamp sales
- Less repacking
- Bigger sales volume

Examine it in Room 812, McAlpin Hotel, Toy Fair

GENERAL ELECTRIC

BETTER LIGHTING MAKES FOR BETTER

PRODUCTIVITY – IN THE PLANT
– IN THE OFFICE



Serve Your Customers Best with

CHAMPION *Lamps*

INCANDESCENT FLUORESCENT

Champion MEANS THE BEST

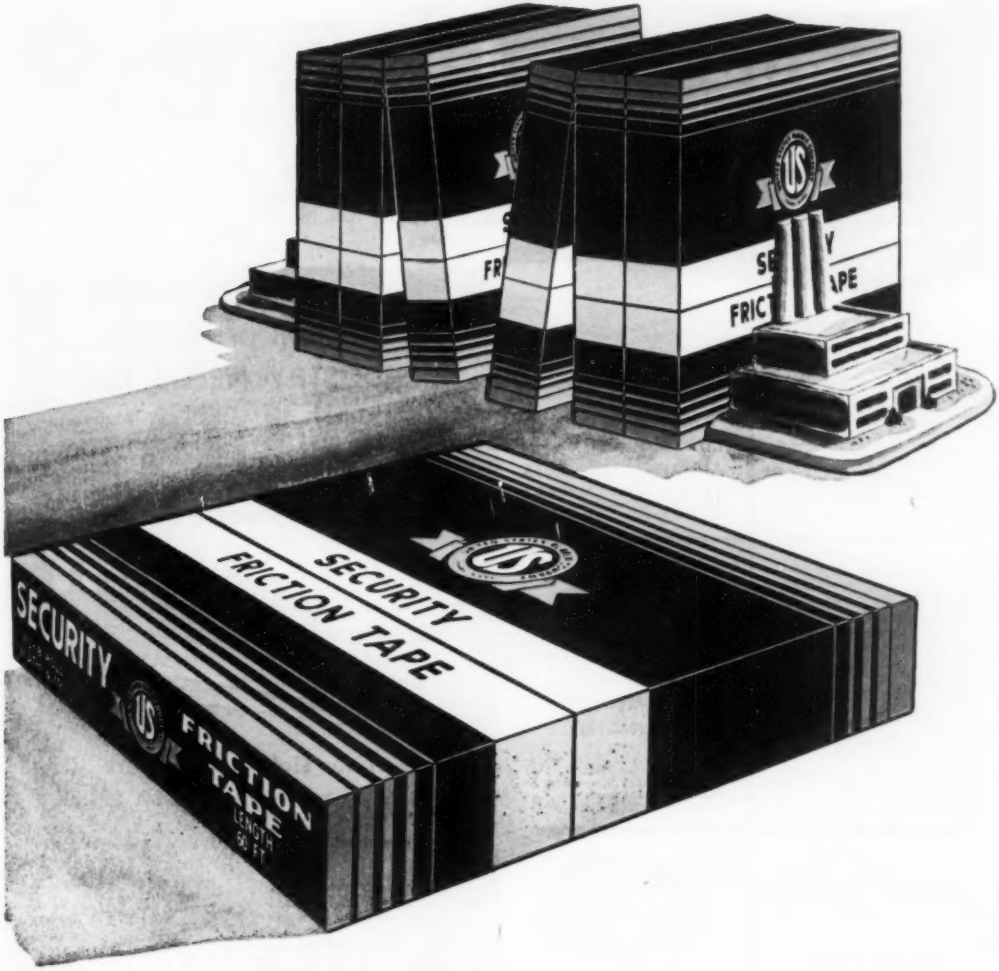
CHAMPION *Means Business –*

Repeat Business!

CHAMPION LAMP WORKS

Lynn, Massachusetts

A DIVISION OF CONSOLIDATED ELECTRIC LAMP CO.



always a best-seller

U.S. Security can't help being popular. It's got everything contractors and electricians want, and *more*. Strong adhesion, high-tensile strength, high-dielectric strength, is straight-tearing, non-ravelling, no pinholes to cause dangerous leaks. Security sells steadily, speedily all year 'round. Check your stocks today.

U.S. Security Rubber Tape is unbeatable for perfect splicing when used with U.S. Security *Friction* Tape.

QUALITY PRODUCTS OF
U.S. RUBBER
SERVING THROUGH SCIENCE

UNITED STATES RUBBER COMPANY

TAPE DEPARTMENT • ROCKEFELLER CENTER, NEW YORK 20, N. Y.

available!

Through increased facilities we are maintaining prompt schedules on most GARCY lighting products. GARCY'S stocking distributors have them on hand now.

5050
2 lamp
VISUALIER SERIES

4 FT. Fluorescent or Slimline

8 FT. Slimline

5054
4 lamp
VISUALIER SERIES

4 FT. Fluorescent or Slimline

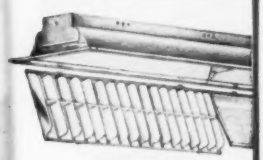
8 FT. Slimline

GARCY
"Thin Panel"
LUMINAIRES
WITH METAL SIDES

2 lamp or 4 lamp; 4 ft. or 8 ft.; fluorescent or slimline; closed or open top; Spot-a-Lite units to match.

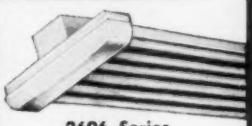
GARCY
"Thin Panel"
LUMINAIRES
ALBALITE GLASS SIDES

2 lamp or 4 lamp; 4 ft. or 8 ft.; fluorescent or slimline; closed or open top.



5500 Series
TROFFERS

1, 2 or 3 lamp rows; louver, lens, diffusing glass or open bottom; 4, 6 or 8 ft. lengths; fluorescent or slimline — also Spot-a-Lites to match.



2696 Series
SLIMLINE LUMINAIRES

Lamps exposed or louver shielded, 4 or 6 lamp rows, 4, 6 or 8 ft. units—also Spot-a-Lites to match. Ideal for stores.

Two-Row Series
EXPOSED LAMP FIXTURES

No. 8808—two lamp, fluorescent or slimline, 4, 6 or 8 ft. May be coupled in continuous runs. Also available louvered (No. 8810HL) and baffled (No. 8818).

9674 Series
combines
FLUORESCENT
and
INCANDESCENT
light

GARCY

BENCH LIGHT

- Ideal for benches where assembly and inspection operations are performed.
- Provides high intensity, localized lighting on working area.
- Parabolic reflector of Alzak aluminum for maximum efficiency.
- May be suspended by chains or stems, or surface mounted to underside of shelves.
- Can be coupled for continuous runs.
- Available in 4 ft. and 8 ft. units for standard 40 watt fluorescent lamps.

GARDEN CITY

PLATING & MANUFACTURING CO.

1740 N. ASHLAND AVE. • CHICAGO 22, ILL.

No. 16772-L

INCANDESCENT UNITS
Wide Variety Available

6970 series

GARCY
Adda-Strip

A complete line for every strip lighting application. Lengths from 18" to 96" for practically every fluorescent or slimline lamp. Also easy-to-attach reflector strips for directional light control.

Now... sell "individually engineered" panelboards ... in minutes, right from your shelves!

BullDog's new principle of standardized units lets you *cut inventories, give immediate delivery* on flexible, less costly panels up to 42 circuits

Here's news that electrical wholesalers will really welcome. By standardizing on component parts, BullDog has engineered 5 basic panelboards that let you fill *any* order up to 42 circuits.

Just 5 devices in all now eliminate hundreds of catalog numbers . . . give you a practical way to stock and sell "individually engineered" panelboards that will fill customers' circuit and rating specifications *exactly, that deliver in minutes right over your counter.*

Now, you can cut inventories, yet maintain better balanced stocks. You can make new profits on business you've been losing through direct customer-to-factory orders. Get extra profits, too, from up to 36 additional Pushmatic circuit breaker sales per panelboard.

In addition, BullDog panelboards have excellent sales features. Customers go for immediate deliveries. They like the flexibility afforded by interchangeable Pushmatics and provisions for adding circuits as needed. And, since BullDog panels are mass-produced and cost less than custom-built panels, they'll get top quality at lower prices.

Get all the details on BullDog Pushmatic Electri-Center Panelboards. Write for free Bulletin 513.

BULLDOG Pushmatic Electri-Center Panelboards

- For plants, commercial buildings, institutions.
- Underwriters'-listed up to 42 circuits.
- Individual Pushmatic units (Thermal Magnetic) rated 15, 20, 30, 40 and 50 Amps.; quick-mounting, fully interchangeable
- Meet Federal Specifications WP 131a Class A
- Push-button switching and automatic circuit protection. No reset position.
- Code Gauge steel fronts, flush or surface type.
- Code Gauge steel boxes with ample knockouts in removable ends.
- 4"-wide gutters for easy wiring.
- Provision for Main Lugs at top or bottom.
- Flexible from every standpoint.

BULLDOG

BULLDOG ELECTRIC PRODUCTS COMPANY
DETROIT 32, MICHIGAN • FIELD OFFICES IN ALL PRINCIPAL CITIES
IN CANADA: BULLDOG ELECTRIC PRODUCTS OF CANADA, LTD., TORONTO
PIONEERS IN FLEXIBLE ELECTRICAL DISTRIBUTION SYSTEMS

1902-1952 . . . SERVING INDUSTRY FOR 50 YEARS WITH FINER ELECTRICAL PRODUCTS

SURE CURE

SQUARE D's MATCHING KNOCKOUTS

for faster, easier, neater GANGING
...no time-consuming conduit bending
—an EXCLUSIVE feature of Square D safety switches—
circuit breakers—starters—contactors—auxiliary gutters

Bending conduit is a familiar scene when electrical devices of varying sizes and makes are being connected. This costly operation can't be avoided if conventional concentric knockouts are used. The sketches show why.

WITH CONVENTIONAL CONCENTRIC KNOCKOUTS *BENDING* IS A "MUST"

Conventional concentric arrangement provides knockouts of various sizes, grouped around a common center, which must be positioned far enough from the rear of the enclosure to permit installation of the largest conduit size. Therefore, the distance from the rear of the enclosure is variable, depending on the combination of knockouts in each cluster. The size of the cluster required changes with device rating.

Expensive—Unattractive!

SQUARE D COMPANY

DETROIT · MILWAUKEE · LOS ANGELES

SQUARE D COMPANY CANADA LTD., TORONTO • SQUARE D de MEXICO, S.A., MEXICO CITY, D.

for the "BENDS"

WITH MATCHING TANGENT KNOCKOUTS —STRAIGHT, NEAT CONNECTIONS

Square D's new tangent arrangement provides ½"-¾" concentric knockouts with larger knockouts in a tangent pattern. The common center of the two smaller knockouts is a constant distance from the rear of the enclosure. This automatically positions the tangent pattern, thus insuring matching knockouts regardless of size of cluster or device rating.

Economical— Attractive!

More good reasons for specifying Square D's electrical distribution and control equipment, straight across the board—less expensive to install and more attractive in appearance.

THOSE BIRDS in the bush are worth hunting too

There are NEW prospects everywhere for T & B fittings

That old saying about a "bird in the hand" is only *half* true today. With procurement subcontracts spreading out all over, it's smart to flush out the *new* birds in the bushes *too*. How? Well, keep an eye on the newspapers and Chamber of Commerce reports. Every day, you'll see items like this. "Steel Drum Maker Gets Order for Aircraft Components"; "Furniture Company Making Fire Control Equipment." Back of every story like that, there's a prospect for you!

HELP THEM . . . SELL THEM

YOU can give these new people the help they need—and *sell* them the supplies they want. T & B is backing you up by designing *and pushing* new fittings for new requirements. Like Self-Insulated Sta-Kon* Terminals—the best thing yet for preventing short circuits in cramped quarters and severe service. New prospects and new fittings will add up to new sales!

*patented

REDDY'S out helping you "Bird-Dog" for Prospects

with this powerful program on T & B Self-Insulated Sta-Kons

HARD-HITTING ADS—Full pages in two colors, appearing every month in the publications your customers and prospects are reading.

DIRECT MAIL—Sales letters, product folders, data sheets to the people you want to reach—opening the door for you when you call.

PUBLICITY — Lots of it, to supplement and strengthen the story the ads are telling.

Of course, this whole campaign stresses the fact that Self-Insulated Sta-Kon Terminals—like all T & B fittings—are supplied, under the T & B Plan, 100% through the T & B distributor . . . and we mean, 100% exclusively!

THERE'S A T&B ENGINEERED PRODUCT for every wiring job in the complete T & B line of fittings for all conductors and raceways.

DESIGNATORS OF SELF-INSULATED SOLDERLESS TERMINALS IN 1935

Call your local T & B representative for full details on this T & B promotion. Ask him, too, about the services of our Field Design Engineers on special requirements.

THE THOMAS & BETTS CO.

INCORPORATED
20 Butler Street
Elizabeth 1, New Jersey

MANUFACTURERS OF ELECTRICAL FITTINGS SINCE 1898

To Supplement your Short Supply of Copper Wire and Cable

USE ALUMINUM -

AN EXCELLENT ALTERNATE FOR COPPER

BULLETIN No. 521

CRESCENT

Aluminum Building Wire

ALUMINUM is a good alternate for copper for the conductors in Building Wires and Cables. Aluminum feeders, particularly in the larger sizes, will show a substantial saving in cost per ampere of useful circuit capacity in many cases, as compared with copper.

CRESCENT Aluminum Building Wire is made with ENDURITE Heat-Resistant insulation in sizes number 6 A.W.G. to 1,000,000 CM at Type RH—75° C—600 Volts.

Aluminum has long been used for electrical conductors. Bare transmission lines of aluminum have been used for over forty years under all types of atmospheric conditions. Aluminum is used for heavy bus conductors and is preferred for this purpose in the electro-chemical industry because of its ability to withstand the highly corrosive conditions which are prevalent in this industry. In our own electro-galvanizing plant aluminum bus bars have been in use with the utmost satisfaction since 1930 and they appear as though they could be used indefinitely. Aluminum building wire has been used extensively in Europe for many years with proven, satisfactory service.

UNDERWRITERS' LABORATORIES APPROVAL

In August, 1946 the Underwriters' Laboratories issued a special bulletin instructing their inspectors to accept on and after September 1, 1946 aluminum conductors, No. 12 A.W.G. and larger in the standard types of building wire. The Underwriters Laboratories' label for R.C. wire will be placed on the tag attached to each coil or reel of Crescent Aluminum Building Wire or Cable. The letters "AL" will appear after the size of wire on the material tags, as well as in the printing on the surface of the wire, so that the aluminum wire can be identified readily. Material tags will be of a special color for your easy identification of the aluminum conductors.

CRESCENT has had much experience in the manufacture of insulated aluminum conductors. CRESCENT ALUMINUM Building Wire employs ENDURITE heat and moisture resistant insulation in sizes No. 1/0 AWG to 1,000,000 CM as Underwriters Laboratories "Type RH—75° C. or RW—60° C."

CRESCENT ALUMINUM Service Cables are available in size No. 6 AWG and larger as Service Drop (Type SD); Service Entrance (Type SEU); or Underground (Type USE, Style RR).

CRESCENT ALUMINUM Power Cables can be furnished with rubber, thermoplastic or varnished cambric insulation and with braid, neoprene jacket, lead or armored coverings. We will welcome your specific inquiries.

Under the C.M.P. Program, it is necessary to get an allotment of aluminum for insulated electrical cables from your Claimant Agency.

Your CRESCENT Sales Representative will be glad to work with you in obtaining additional cable business above what is possible in critically short copper.

Send Now For Bulletin No. 521
It Gives Complete Information

CRESCENT
WIRE & CABLE
CRESCENT INSULATED WIRE & CABLE CO.
TRENTON, N. J.

Now they're here . . .

AMPLEX INCANDESCENT AND FLUORESCENT GENERAL SERVICE LAMPS!

and that gives you a

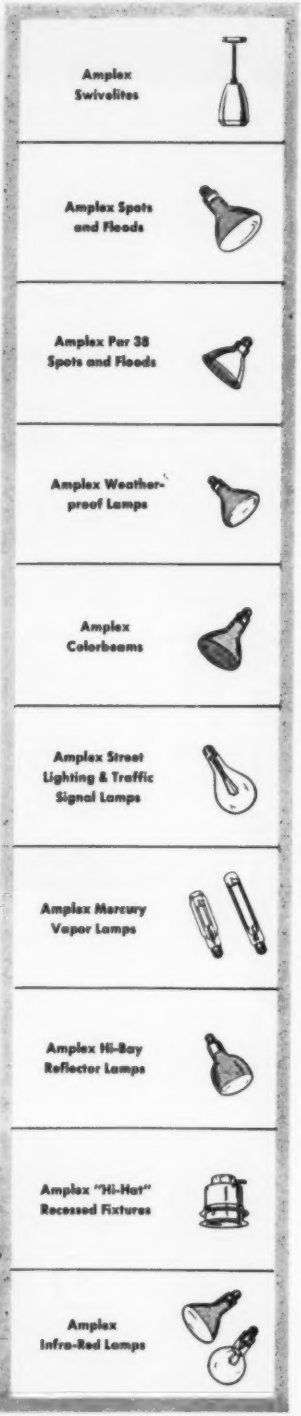
COMPLETE

AMPLEX LINE

NOW, on top of the fast-moving Amplex specialty lamps you can cash in to the limit on Amplex incandescent and fluorescent general service "bread and butter" lamps.

These new lamps are all ready to go—in a full range of types and wattages. They're precision-built to Amplex high quality standards and are born sales leaders in the biggest market in the field.

From now on, with a complete line—a lamp for every purpose—the *Amplex franchise is absolutely tops for volume and profits.* Act today. It will pay off! Amplex Corporation, Dept. A-3, 111 Water Street, Brooklyn 1, New York.



AMPLEX

Sealed-Beam Reflector Lamps, Colorbeam Lamps, Spotlites and Floodlites, Industrial Infra-Red Heat Lamps, Vibration and Rough Service Lamps, Street Lighting Lamps, Traffic Signal Lamps, Incandescent Lamps, Fluorescent Tubes, Display Accessories.

ROLL THIS WAY!

You bet ...with your help!

Our job—yours and ours—is to roll wire, conduit and cable to your customers as fast as possible—especially those power companies, manufacturers and contractors who are deep in defense work.

We'll roll it out as fast as is humanly possible—and here's where you can help. Urge your customers to anticipate their requirements as far ahead as possible. Such "look-ahead" ordering will help us roll it to them *through you*—on schedule!

In our advertising, we're telling them: "You'll save—and get it faster—from a Triangle Distributor".

TRIANGLE CONDUIT & CABLE CO., INC.

"Glazon" Building Wire • Bare Wire • Armored Cable • "Glazon" Non-Metallic Sheathed Cable • Service Entrance, Service Drop, Varnished Cambric Braided or Leaded, Control Wire, Trioprene Trench, Power and Parkway Cables • Rigid Conduit, Hot-Dipped Galvanized and Black Enameled • Electric Metallic Thin Wall Conduit • Flexible Steel Conduit

NOW... A NEW VENTED EXPLOSION-PROOF FIXTURE!

Full-Circle Venting!

60 to 500 WATTS

Thanks To Appleton Engineering Skill!

Listed by Underwriters' Laboratories, Inc., for Class 1, Group C and D, Hazardous Locations.

- **Greater Safety**
- **Easier To Maintain; Faster To Service**
- **Maximum Lighting Efficiency**
- **Cooler Operating**

Here's the safest explosion-proof fixture ever designed for hazardous location lighting! Exclusive engineering features combined in the new Appleton AA-51 line make these fixtures safer, more efficient, easier to install and maintain—*years ahead of the field!*

AA-51 full circle venting—use of the entire lower edge of the hood as a continuous louvre—is combined with porous metal interiors to provide much more even heat distribution, *definitely cooler operation.* Special shock-absorbing sockets mean a longer useful life for every lamp bulb. And greater light output—proved by lighting curve tests on every wattage—gives you a bonus of extra light for your money every hour the AA-51 operates!

Wire-free canopy construction in AA-51 canopies permits instant removal of the entire fixture! By exchanging a clean, freshly lamped fixture unit for the one taken down, all actual re-lamping and cleaning may be done in safety at the work bench. No juggling of separate parts while perched on a ladder! Canopies themselves—including ceiling types and long and short bracket types—are standardized, will take any fixture in the AA-51 line, 60 to 500 watts, without rewiring. To safely confine arcs, should current accidentally be left on while removing fixture, five full threads on canopy are engaged whenever contact is made or broken!

The ALL-NEW

APPLETON AA-51 SERIES

EXPLOSION-PROOF LIGHTING FIXTURE

1. Standardized Canopy
2. Connecting Block with Spring-leaf Contacts
3. Release lug for easy fixture removal
4. Shock-Absorbing Socket
5. Porous Metal Interiors
6. Notches provide screw driver leverage in releasing globe ring
7. Heat and impact-resisting Glass Globe
8. Detachable Reflector

Sold Through Electrical Wholesalers

APPLETON ELECTRIC COMPANY

1734 Wellington Avenue • Chicago 13, Illinois

Field Engineers: NEW YORK, 50 Church St. • DETROIT, 3049 E. Grand Blvd. • CLEVELAND, 1836 Euclid Avenue • SAN FRANCISCO, 655 Minna St. • ST. LOUIS, 227 Frisco Bldg. • LOS ANGELES, 100 N. Santa Fe Ave. • ATLANTA, 724 Boulevard, N. E. • BIRMINGHAM, 809 Brown-Marx Bldg. MINNEAPOLIS, 305 Fifth St., S. • PITTSBURGH, 414 Bessemer Bldg. • BALTIMORE, 100 E. Pleasant St. BOSTON, 10 High Street • DENVER, 1921 Blake Street • PHILADELPHIA, 2013 Locust Street CINCINNATI, 608 American Bldg. • HOUSTON, 717 M. & M. Bldg. • HAVANA, Cuba, Malecon No. 9 BINGHAMTON • DALLAS • INDIANAPOLIS • KANSAS CITY • ORLANDO • MILWAUKEE NEW ORLEANS • SEATTLE • PORTLAND, ORE.

Export Representatives: International Standard Electric Corp., 67 Broad St., New York 4, N. Y.

APPLETON ELECTRIC PRODUCTS

Washington STRAWS

CONTROL TROUBLES • The administration is having a harder time than expected getting an extension of price and materials controls from Congress. World-wide easing of raw materials supplies, and price drops, are two big reasons.

Top mobilization officials have a confidential report that steel and aluminum will be so easy by next January that the controlled materials plans for those metals could be scrapped. World lead prices have dropped to the U. S. ceiling and zinc is in easier supply. Even the demand for copper—still tightest of the major metals—has dropped sharply abroad. Europeans were paying more than 50 cents per lb. for it a few months ago. Now it's going for 40 cents. That's still a long way from 27½ cent ceiling U. S. users are allowed to pay for foreign copper. But every time the price gap narrows, the argument for an extension of present controls is weakened.

The odds are still for a controls law granting pretty much the same powers as now. But Congress won't pay much attention to Truman's request for a two year extension. They won't make it for more than a year. And if present supply and price trends continue, the chances of milder controls over wages and prices are a possibility.

PRICE PUZZLES • Debate over controls boils down to whether the current price declines and weak spots in business are temporary. They clearly would be temporary if the military wins its drive for a bigger arms budget. Pentagon officials aren't satisfied with the way Truman cut their requests. Congressional committees, by their questioning, show concern over whether the cut was justified by world conditions.

The arms program that Truman called for was big itself—up to $4-billion a month for delivered goods for an 18-month period beginning the end of this year. That's the so-called stretch out period. Relaxations of restrictions on consumer goods, cancellation of a new round of lead restrictions, optimistic reports on aluminum by the end of the year—these things hide the basic fact that the mobilizers once figured on the $4-billion a month rate for only six months, and now must plan on it lasting three times as long.

There's also a factor in the current price slumps. Altogether, the officials who want controls extended put up a strong argument that raw materials prices will stop their decline before long. But they have a hard time convincing Congressmen, who read in the newspapers that supplies are easing.

POLICY SHIFT • NPA changed its mind about industrial construction this year. Instead of more liberal materials allotments later this year, NPA has ruled out any industrial building except what is urgently needed for defense. At the same time, it relaxed controls over commercial and public service buildings like schools and hospitals. To the electrical equipment business, it won't mean a cut in sales. But it may mean a change in customers.

There's a huge pent-up demand for new factories. A survey by McGraw-Hill economists showed that industry wanted to spend $21-billion on new plant and equipment this year. If NPA sticks by its new policy, most new plants won't get started until 1953.

The tip-off is structural steel allotments for new industrial plants in the second quarter—

down 26 per cent from the first quarter. The new allotment was 265,000 tons. NPA figures on another slash—to 225,000 tons per quarter—for the last half of the year.

MORE STEEL • Actually, more structural shapes are expected from mills and fabricators. Industry men have been warning NPA officials for weeks that the lighter shapes—in particular—will be in easy supply.

NPA's reason for relaxing non-industrial building was to be sure this increased supply got used, but not in a way that would cause a drain on scarce machines and manufacturing equipment.

One step was to authorize 645 new religious and community buildings. Controlled materials for the projects will be allotted in the second half of the year. There are 446 churches on the list and 110 municipal buildings like police stations and firehouses. It gave approval to 186 commercial projects which were started last year and then halted due to lack of materials. It will shortly issue a revision of CMP Regulation 6 which will more than double the amount of steel that can be self-certified for small non-industrial buildings.

BUSY HOME-BUILDERS • January, usually slow for residential building, had 68,000 starts. Adjusted for the season, this indicates a lot more houses than the 800,000 mobilizers have talked about.

Builders are finding the materials they need. Mortgage money may become the biggest problem. Interest rates have been going up. But the Federal Housing Administration and the Veterans' Administration cling to 4½ per cent and 4 per cent mortgages. Mortgage lenders may decide to put their money where it can earn more.

FAIR TRADE VETO? • Odds are increasing that Truman would veto any of the fair trade bills now being discussed in Congress. Both the Federal Trade Commission and the Anti-trust Division oppose the pending bills, and Truman could consistently borrow their arguments. The big one is that, in attempting to set minimum retail price levels, the bills would tend to guarantee retail profits. Politicians figure a veto would put Truman on the side of lower prices at a time when he would need something to counteract the price effects of a steel wage deal.

COPPER CUT OPPOSED • The electrical industry has warned NPA against a plan to cut copper for new homes by 40 per cent. Under present rules, 35 lbs. of copper per house is allowed for wiring. NPA would like to cut this to 21 lbs.

The industry favors a flexible formula, based on 25 lbs., plus a half lb. for each 100 square feet of living area. This would be a minimum. It allows enough copper for only one heavy-use appliance. In those areas where home-builders are forced to depend on electricity for additional heavy appliances, the industry thinks 3½ lbs. of copper per appliance should be added to the formula.

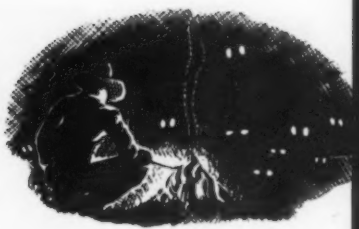
In another move to save copper, NPA restored restrictions against the use of copper lighting fixtures except for specifically named functional parts. Permitted uses in explosion-proof fixtures, for example, are for current carrying parts, plating, rivets, eyelets, screws, small fasteners, threaded parts, clamping, sealing and attachment devices. All kinds of lighting fixtures are covered in the order. NPA thinks it will save around 2,000 tons of copper per quarter. Similar rules were in effect from April to July last year.

STEEL WAGE DEAL • The price and wage stabilizers have agreed on a 20 per cent an hour raise for steel workers and around $3 per ton increase for steel. If this formula goes through, there will be other wage and price increase later in the year.

The deal would cut more ground from under administration spokesmen who are telling Congress that a strong control law is needed to check inflation. If inflation is such a danger, why help it along with wage and steel increases? That's the line being taken by congressmen who are under pressure from farm and business groups to relax controls.

(Washington, D. C.—March 4, 1952)

SELL



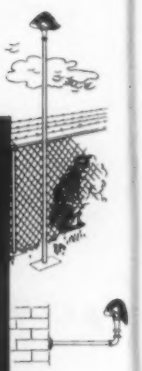
. . . protective lighting to guard defense production

The use of light to hold night-prowling marauders at bay dates back to man's earliest days. Appleton Floodlights give industrial plants and personnel this same time-tested protection in its most modern, most effective form. These big, rugged fixtures are expressly designed to guard industrial properties while providing the good light necessary for ideal working conditions.

For example, a series of Appleton Elipso Standlites—properly spaced along a fence-line or mounted on buildings—forms a veritable barrier of light. This is only one of the many expertly designed fixture models from the complete Appleton Floodlight line—a line that includes a sound, scientific answer to every known floodlighting problem.

For fixtures that meet every industrial requirement—including hazardous locations—whether indoors or out, contact Appleton, pace-setting manufacturer of electrical equipment for nearly half a century.

ELIPSO STANDLITE—Expertly designed to provide protection for industrial properties. Mounts on pole or wall.



APPLETON Floodlights

DIFFUSO FLOODLIGHT—For even illumination of service stations, athletic fields, parking lots, etc. Pole, bracket or crossarm mounting.

SPORTO—For high intensity illumination over large areas. Weatherproof hood allows for complete vertical or lateral positioning. Pole, bracket or crossarm mounting.

Sold Through Electrical Wholesalers

APPLETON ELECTRIC COMPANY

1734 WELLINGTON AVENUE • CHICAGO 13, ILLINOIS

Field Engineers: NEW YORK, 50 Church St. • DETROIT, 3049 E. Grand Blvd. • CLEVELAND, 1836 Euclid Avenue SAN FRANCISCO, 655 Minna St. • ST. LOUIS, 227 Frisco Bldg. • LOS ANGELES, 100 N. Santa Fe Ave. • ATLANTA, 724 Boulevard, N. E. • BIRMINGHAM, 809 Brown-Marx Bldg. • MINNEAPOLIS, 305 Fifth St., S. • PITTSBURGH, 414 Bessemer Bldg. • BALTIMORE, 100 E. Pleasant St. • BOSTON, 10 High Street • DENVER, 1921 Blake Street • PHILADELPHIA, 2013 Locust Street • CINCINNATI, 608 American Bldg. • HOUSTON, 717 M. & M. Bldg. • HAVANA, Cuba, Malecon No. 9 BINGHAMTON • DALLAS • INDIANAPOLIS • KANSAS CITY • ORLANDO • MILWAUKEE • NEW ORLEANS SEATTLE • PORTLAND, ORE.

Export Representatives: International Standard Electric Corp., 67 Broad St., New York 4, N. Y.

APPLETON

CONDUIT FITTINGS • LIGHTING EQUIPMENT • OUTLET AND SWITCH BOXES • EXPLOSION-PROOF FITTINGS • REELITES

ACCURATE TAPES ... for every INSULATING need!

Tape profits are *IMPORTANT PROFITS!*

And a good way to build tape volume is to make Accurate your complete tape department. Three reliable tapes nationally advertised throughout the electrical industry.

ACCURATE RUBBER TAPE

Features high elasticity, excellent cohesion, high dielectric and super aging qualities. Available in Standard and A.S.T.M.-A.A.R. grades.

ACCURATE FRICTION TAPE

High grade rubber carefully compounded with finest cotton base provides maximum mechanical protection for every wrap. Made in Standard and A.S.T.M. grades.

ACCURATE Plastic Tape

Offers a bulk-reducing combination of thin caliper, good mechanical and dielectric strength. Recommended for use wherever plastic tape is practical.

... no finer tapes at any price!

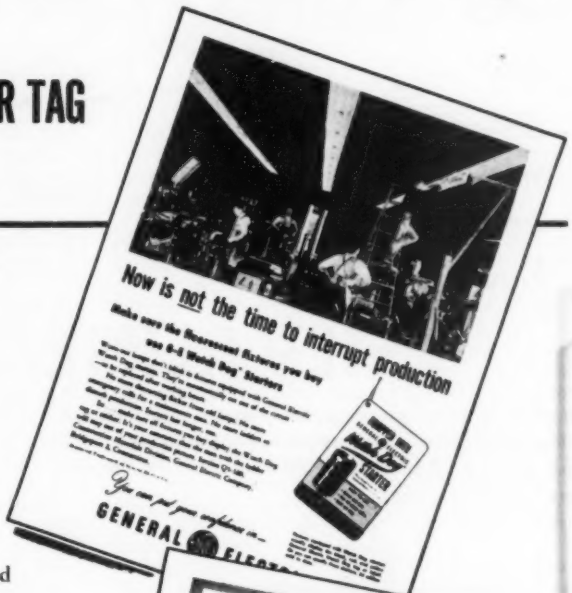
For big wiring jobs or small, Accurate is the choice for positive tape protection. Both friction and rubber are strong, pliable, easy to apply. Accurate tapes make accurate wraps — pull tight and clean over irregular surfaces. When you order tape, mention Accurate by name. It's the one sure way to complete tape satisfaction. For a complete guide to tape selection and tape buying, ask for the new Accurate Data Folder. Accurate Mfg. Company, Garfield, New Jersey — address inquiries to Dept C.

amc

Now is the time to talk savings

with the

G-E WATCH DOG* STARTER TAG


Now is not the time to interrupt production
Make sure the fluorescent fixtures you buy use G-E Watch Dog* Starters
You can put your confidence in—
GENERAL ELECTRIC

Now is not the time to interrupt a sale...
Make sure the fluorescent fixtures you buy use G-E Watch Dog* Starters
You can put your confidence in—
GENERAL ELECTRIC

• Through advertisements like these, more and more of your customers are learning about the important savings that go with fixtures equipped with G-E Watch Dog starters.

Begin today to tie in with this story of economy. Display the Watch Dog tag. Show your customers the famous red reset button of the Watch Dog starter. It will pay off in increased acceptance and reduced call-backs.

So, make the G-E Watch Dog story part of your story now for easier selling . . . for sales you can be proud of. Section Q13-326, Construction Materials Division, General Electric Company, Bridgeport 2, Connecticut.

*Registered Trade-mark of General Electric Company

You can put your confidence in—

GENERAL ELECTRIC

look

what you get when you buy

SILVALINE

If you're looking for a longer lived, more weather resistant, more dependable service entrance cable—take a good long look at what Silvaline* Type SE with true URC Weather-proof protection offers;

1. **GENUINE URC SATURANT**—not an inferior substitute—makes Silvaline's durable fibrous covering indefinitely resistant to weather.

2. **TOUGH NEOPRENE TAPES** cover each individual conductor—increase resistance to heat, moisture and weather... in 2 colors, black and red—give the preferred means of conductor identification.

3. **OVER-ALL-BRAID COVERING** provides high resistance to deterioration and adds life to the covering.

4. **SILVER-FINISH COATING** provides clean handling and an attractive surface ... makes greatly improved base for house paint—permits use of URC saturant and finish without discoloring externally applied paints.

Write your nearest Anaconda Sales Office or Distributor today. Find out the full details on how Silvaline can do a more dependable job, more economically. Anaconda Wire & Cable Company, 25 Broadway, New York 4, New York. *Trademark

the right cable for the job

ANACONDA®

WIRE AND CABLE

TIMES and TRENDS

Compulsory Unionism

If you hold the opinion that union shops are undemocratic. If you believe that compulsory unionism prevents an individual from exercising his inalienable right to join or reject a union. If you believe that the union shop encourages racketeering and dictatorship by depriving union members of an opportunity to protest bad leadership. Then, you had better do something—*now*.

Compulsory unionism has been made the key issue in three important labor dispute cases pending before the War Stabilization Board at the present time. Those opposing this situation point out that the industry members of WSB need all the support they can get in order to withstand the pressure being exerted by labor leaders for union shops.

Make no mistake about it. This is a vital issue which concerns not only the businessman but all American citizens. Unless the people act now they may suddenly awaken to discover that a decision contrary to their wishes has been made for them by a government agency.

The threat of compulsory unionism changed from a potential danger to an emergency recently when a Presidential fact-finding board recommended that the union shop be imposed upon about 1 million workers classified as non-operating railroad employees. This was the outright award of a union shop granted by a public board. This action, industry leaders point out, could become a precedent on which the WSB might act.

How did this controversy come about?

During World War II, you will recall that the unions accepted a "maintenance of membership" ruling as a compromise on their demand for the union shop. This arrangement has never been satisfactory to them. Union officials have pressed continually for either a closed shop, by which they could insist on members-only being hired, or a union shop, requiring all employees to join the union.

During the past year, industry leaders have viewed with mounting alarm three separate actions which have enabled the unions to move nearer and nearer to their goal—the union shop. The first big gain was made when the administration granted the War Stabilization Board authority to act in labor disputes. Additional assistance came as the result of a Congressional action to repeal a section of the Taft-Hartley law that granted employees the right to express themselves on whether or not they wanted compulsory unionism.

The union gained further ground when Congress granted the union shop to rail labor workers by amending the Railway Labor Act which had, up until that action, barred the union shop.

Although industry leaders fought bitterly to defeat such a move, the administration insisted on giving WSB the authority to recommend settlements in labor disputes. Government leaders were convinced that WSB, in order to be effective, had to be armed with certain "bargaining" powers.

Every day new wage demands are being submitted to WSB. Many of these demands cannot be granted because they exceed the board's limitations. WSB realizes only too well that exceeding its limits brings a round of wage increases, a round of price increases, and pushes up the cost of living. With the power to recommend settlements, WSB is able to bargain with the unions—offering them a recommendation of the union shop instead of increased wages. The union leaders intend to make the most of this golden opportunity.

Today, the decision is at a stalemate with industry and labor members of the board locked in a struggle. Thus the deciding votes are to be cast by the public members. These members have been hesitant. We would like to believe that the public members are considering with great care the fact that compulsory union membership takes away a measure of the individual freedom so important to this nation. However, the board's major consideration in the three cases before it is not the citizen's rights, but, rather, whether or not a union shop recommendation will set off a series of similar demands by all unions. Employers would be placed in the position of either granting the union shop or come before WSB where it would be recommended.

How much does a government agency recommendation actually mean? Although it is true that the board cannot order a union shop, experiences of the past have shown that recommendations issued by government agencies are almost as strong as an outright order. In time of an emergency, such as the present defense program, the government, as the largest single customer of industry and business, soon finds itself issuing orders via recommendations that are not consistent with the basic purpose of an impartial agency.

Arthur W. Hooper

EDITOR

NEW-- PYLE-NATIONAL ANCHORLITE T. M. REG.

THE SUSPENDED *INSIDE AND UNDERSIDE* ILLUMINATOR

Proper lighting is a prerequisite of proper loading which is essential in reducing loss and damage claims

REDUCES COST AND SPEEDS FREIGHT LOADING

Pyle-National Anchorlite installations in freight terminals have already effected important savings in labor and maintenance expense... savings far greater than the railroad companies had expected from their modest investment in this convenient, economical source of good lighting at loading platforms.

It was quickly discovered that Pyle Anchorlites kept the floors clear and eliminated the need for extension cords and portable lamps.

Man hours were no longer wasted finding extension cords and plug-in outlets, untangling cords, driving nails for portable lamp support, or replacing lamps broken by dropping.

Costly replacements of stolen cords or cords damaged by constant handling, dragging, or by truck wheels were eliminated.

Fire and accident hazards due to short circuits, ungrounded equipment or tripping over cords were eliminated as well.

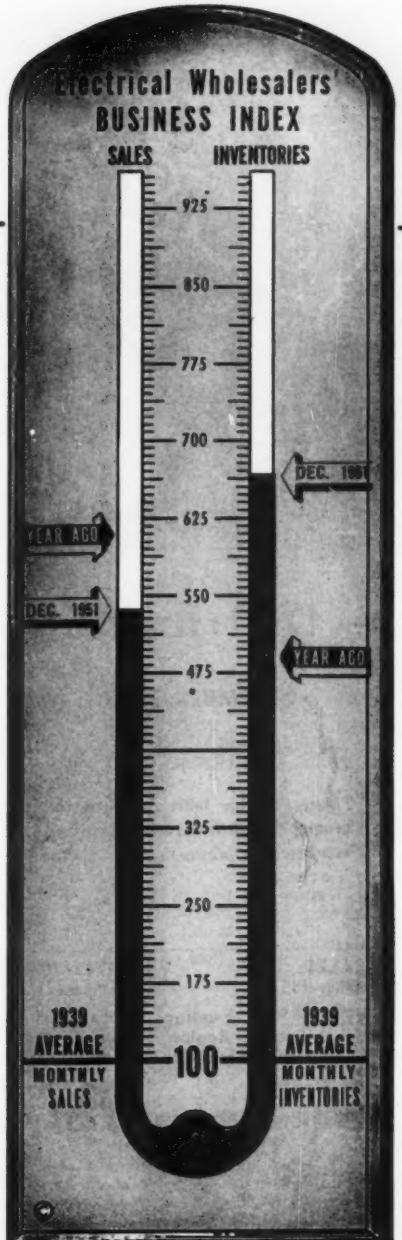
THE PYLE-NATIONAL COMPANY

1352 North Kostner Avenue • Chicago 51, Illinois

BRANCH OFFICES AND AGENTS in principal cities of the United States
EXPORT DEPARTMENT: International Railway Supply Co., 30 Church St., New York
CANADIAN AGENT: The Holden Co., Ltd., Montreal, Toronto, Winnipeg, Vancouver

SINCE 1897

CONDUIT FITTINGS · GYRALITES · TURBO-GENERATORS · FLOODLIGHTS · PLUGS & RECEPTACLES · MULTI-VENT AIR-DISTRIBUTION



ELECTRICAL WHOLESALING

THE NATIONAL MAGAZINE OF ELECTRICAL WHOLESALE DISTRIBUTION

A McGraw-Hill Publication

Electrical Wholesale Distribution

For the Month of December 1951

SALES 1951 sales of electrical goods wholesalers were estimated at a record $5,545 million—6 per cent above the 1950 level.

By class of house, full-line wholesalers increased sales 10 per cent over 1950, while wiring supplies and construction materials distributors were up 21 per cent. Appliances and specialties wholesalers, however, dropped 11 per cent below 1950.

December sales by all classes of houses combined, estimated at $457 million, fell 6 per cent below November. Full-line wholesalers and appliances and specialties wholesalers were down 5 and 10 per cent, respectively. Wiring supplies and construction materials distributors indicated no change.

Compared with December 1950 levels, sales for the last month of 1951 were down in all classes: full-line wholesalers, 12 per cent; wiring supplies and construction materials distributors, 3 per cent; appliances and specialties wholesalers, 23 per cent.

(Business Index: December 1951—537; December 1950—615)

INVENTORIES Year-end inventories (valued at cost) of electrical goods wholesalers dropped 6 per cent below the November 30 level, but were 38 per cent above stocks on hand December 31, 1950.

Full-line wholesalers and wiring supplies and construction materials distributors continued to report inventories substantially higher than a year earlier. However, appliances and specialties wholesalers—down 8 per cent—experienced their first decline from year ago stocks since August 1950.

Compared with the previous month, December inventories of full-line wholesalers and appliances and specialties wholesalers were down 5 and 11 per cent, respectively. Wiring supplies and construction materials distributors showed no change.

At the current rate of sales, stocks on hand represented approximately 56 days' business.

(Business Index: December 1951—666; December 1950—485)

The position of these monthly index indicators is determined by tabulation of hundreds of reports from an *identical* group of wholesale distributors located throughout the U. S. who furnish reports regularly. The figures are compiled for ELECTRICAL WHOLESALING by the Bureau of Census of the U. S. Department of Commerce. The national and regional analyses which follow include the reports from a much larger but less regularly reporting group, and the percentages arrived at do not always check exactly with the index position.

The Editor

Electrical Wholesale Distribution

REGIONAL ANALYSIS

DECEMBER 1951

SALES-WISE, seven out of the nine regions (with all classes of houses combined) fared better in 1951 than they did in 1950. The East North Central area led with a 14 per cent gain. Only the East South Central and West North Central divisions fell below 1950. Their sales declines were 5 and 2 per cent, respectively.

A comparison of December 1951 sales with those of the previous month shows decreases for all regions. The Pacific area indicated the sharpest decline, 13 per cent.

Compared with December 1950 levels, all regions reported even steeper sales drops for the last month of 1951. The greatest of these, 26 per cent, was indicated by the West North Central area. The smallest decrease, 7 per cent, was reported by the South Atlantic division.

Eight of the nine regions showed inventory declines under November levels. The East North Central and South Atlantic areas tied for the lead with 8 per cent decreases each. Only the East South Central division indicated an increase, 5 per cent.

A comparison with December 1950 inventory levels shows large gains for all regions, but continues to indicate a trend toward closing the gap with year ago figures. The New England area tops the list with a 62 per cent gain. The East South Central division is lowest with a 16 per cent increase.

Figures in this table apply to the geographical divisions as outlined and numbered in white on map above.

SALES December 1951 Compared in % with		Trading Region (See Map)	INVENTORIES December 1951 Compared in % with	
Nov. 1951	Dec. 1950		Nov. 1951	Dec. 1950
— 7	—15	1	— 1	+62
— 1	— 9	2	— 7	+47
— 5	—13	3	— 8	+39
— 8	—26	4	— 5	+30
— 1	— 7	5	— 8	+33
— 6	—11	6	+ 5	+16
— 7	— 8	7	— 2	+35
— 9	—23	8	— 7	+40
—13	—17	9	— 5	+34

STATES COMPRISING REGIONS

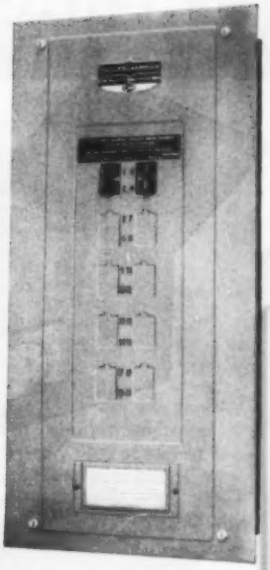
States Comprising Geographic Regions: New England (1)—Me., Vt., N. H., Mass., R. I., Conn.; Middle Atlantic (2)—N. Y., N. J., Pa.; East North Central (3)—Ohio, Ind., Ill., Mich., Wis.; West North Central (4)—Minn., Iowa, Mo., N. D., S. D., Neb., Kan.; South Atlantic (5)—Del., Md., D. C., Va., W. Va., N. C., S. C., Ga., Fla.; East South Central (6)—Ky., Tenn., Ala., Miss.; West South Central (7)—Ark., La., Okla., Tex.; Mountain (8)—Mont., Idaho, Wyo., N. M., Colo., Ariz., Utah, Nev.; Pacific (9)—Wash., Ore., Calif.

SINGLE POLE
The Multi-Breaker for minimum needs. Ask for MO1

TWO POLES
The Multi-Breaker for small homes. Ask for MO2

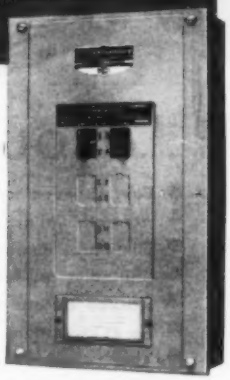
FOUR POLES
in a single block.
One and two pole combinations. Ask for MO4

Everything you need
Everything you want
in just 6
Cutler-Hammer Multi-Breakers



4 POLES BASIC
UP TO 20 POLES
Made by adding four-pole "plug-in" units. Ask for MO20

4 POLES BASIC
5-6-7-8 POLES
Made by adding single pole units. Ask for MO8



4 POLES BASIC
UP TO 12 POLES
Made by adding four-pole "plug-in" units. Ask for MO12

UP TO 20 CIRCUITS FOR ALL DOMESTIC PROTECTION NEEDS

These six Cutler-Hammer Multi-Breakers that provide from one to 20 circuits meet all domestic protection needs . . . small homes, medium size homes and large homes. The fundamental unit is a block with four single pole breakers of various capacities. These blocks (plus the use of single pole "ad-ons") can be combined to provide any combination as shown in the pictures above. You carry a small stock and you make up the Multi-Breaker you want—*for* the job—*on the job.*

These Cutler-Hammer Multi-Breakers offer you and your customer every wanted feature . . . circuit interrupter that needs only the touch of a little lever to restore service, "slow-fast" *thermal magnetic* element that is slow to act on safe overloads but acts instantaneously even on low value short circuits (a standard feature that is provided at no extra cost), safe, factory-sealed mechanism, attractive appearance that harmonizes with modern architecture . . . and world-famous Cutler-Hammer dependability. Carried in stock by reliable wholesalers everywhere. CUTLER-HAMMER, Inc., 1327 St. Paul Ave., Milwaukee 1, Wisconsin.

CUTLER-HAMMER
MULTI-BREAKER
C-H

EXTRA PROFIT for you···with PACKAGED FITTINGS

THE CONTENTS OF THIS PACKAGE BEAR THE LABEL OF Underwriters' Laboratories, Inc. UL

Look for this label when you buy fittings. It is your guarantee of uniform quality.

···YOU WIN *7 WAYS*

- Easy to inventory
- Accurate Count in filling orders
- Eliminates damage to fittings
- Unit sales are increased
- Stacked cartons save space
- No extra cost to you
- Your customers prefer Conduit of COLUMBUS fittings in cartons

SOLD ONLY THROUGH RECOGNIZED WHOLESALERS

Conduit of COLUMBUS

CONDUIT PIPE PRODUCTS CO., OHIO

PIPE COUPLINGS • PIPE NIPPLES • ELBOWS, RIGID & E.M.T.
RUNNING THREAD • GOOSENECKS • WALL PLATES

POINTING the WAY To Continuing Prosperity

The set of figures in the middle of this page is news of high importance to every American.

In effect, it says that there is no basis in fact for all this talk about a collapse of capital expenditures plunging us into a depression following the industrial build-up for defense.

Such talk assumes that without defense orders business would spend relatively little for new industrial plant and equipment. The figures below show that that assumption is not justified.

penditures in 1953, 1954 and 1955, provided the money to carry them out can be obtained.

A Record in '52

As was expected, their plans call for another record-breaking volume of capital expenditures by business in 1952. But, as many did not expect, the McGraw-Hill survey also discloses plans for very heavy capital expenditures in each of the three years following. Expenditures now planned for those years are, to be sure, lower than those planned for 1952. But the significant fact is not that

BUSINESS PLANS FOR NEW PLANTS AND EQUIPMENT (Millions of Dollars)

	Actual Spending 1950*	Actual Spending 1951*	McGraw-Hill Survey			
			Planned	— Preliminary Plans —		
			1952	1953	1954	1955
Manufacturing	7,491	11,141	12,921	10,028	8,525	8,194
Mining	684	806	943	415	321	358
Railroads	1,136	1,564	1,642	1,248	1,117	1,002
Electric & Gas Utilities**	3,298	3,676	3,948	3,360	3,204	2,748
Other Transportation & Communications	1,392	1,592	1,721	1,671	1,943	1,839
ALL INDUSTRY	14,001	18,779	21,175	16,722	15,110	14,141

*U. S. Department of Commerce
**_Electrical World_ (A McGraw-Hill publication) and American Gas Association.

The figures come from the fifth annual McGraw-Hill survey of business plans for new plant and equipment. Companies were asked to report through that survey not only their plans for 1952, but plans they now have in hand for capital ex-

they are lower. Experience shows that plans made several years ahead always overlook many expenditures that are needed later.

The significant fact is that the expenditures already planned for 1953-55 are so high. For example,

those now planned for 1955 would be higher than those of 1950, which, at that time, were second highest in our history.

If these plans are carried out we shall have an essential element of continuing prosperity. Sustained expenditures for capital expansion and betterment account directly for a large share of our employment and consumer income. Moreover, consistent modernization of industrial plant raises production efficiency and brings more and better goods and services within reach of more consumers.

It is not to be expected, of course, that we can come down from the peak of the defense boom without readjustments in some sectors of business. But if capital expenditures by business are carried out on the scale now planned, we shall be able to take any necessary readjustments in our stride, and continue to increase our industrial strength.

From V-J Day to the end of this year, manufacturing industries will have spent over $60 billion for new industrial plant and equipment. This is more than the value of all the plant and equipment these industries had on their books at the end of World War II. It is this heavy outlay that causes some, assuming most postwar plans for industrial expansion and modernization will be completed, to fear a collapse of capital expenditure.

Plans to Go Ahead

But American industry still has plans to go right ahead expanding and improving its facilities. This was the most striking single finding of this year's survey.* It disclosed also that after 1952:

– 83 per cent of the companies answering the survey are planning substantial further modernization.

– 48 per cent will need more capacity to make their present products.

– 33 per cent plan additional capacity to make new products.

It cannot be too strongly emphasized, however, that these plans represent what American industry *wants* to do. They are a concrete expression of hope and aspiration. As such they are extremely important, for they dispose of the idea that business considers the job of expanding and improving its facilities as finished, or anywhere near finished.

But the plans carry no guarantee of accomplishment. If they are to be realized, business must have the funds to carry them out. There is no assurance that the money will be available if the present level of corporation taxes is continued. Eight out of ten companies, according to the McGraw-Hill survey, will rely entirely on profits and reserves to finance their 1953-55 programs. So, in calculating their programs for these years, the companies were asked to assume relief from "excess profits" taxation.

Federal taxes now take at least 52 per cent of a corporation's profits, and 82 per cent of any profits in the so-called "excess profits" bracket. Despite this drain on their funds, companies are able to finance their 1952 programs because (1) they are borrowing heavily, and (2) many of them are getting government loans or special tax concessions on new facilities installed for defense purposes. But these are emergency aids.

Only Two Ways

When the present defense program tapers off, there will be only two ways by which business can possibly increase its principal source of funds for new plant and equipment. One way is to make more profits before the tax collector takes his cut. And the only way many companies, already operating at capacity and high efficiency, can do that quickly is by raising their prices. That is an unpopular method. Also, with the return to more competitive markets, it might be self-defeating.

The other way is for the federal government to release its strangle hold on business profits. The so-called "excess profits" tax – the 82 per cent tax which is really a tax on business growth – should be repealed, effective January 1, 1953. And a cut in the basic tax of 52 per cent on all corporate profits should come not much later. That is by all odds the most important single step toward assuring that business plans already made for capital investment in 1953, 1954 and 1955 are carried out. It is the most important single step toward sustaining our present prosperity.

Through its plans for continued expansion and improvement of its facilities, American business clearly points the way to avoid the depression that so many have feared – and the Communists have so ardently hoped – would follow the peak of defense mobilization. It will be a tragedy for our country and for Americans in every walk of life if we do not insist that business get the chance to follow this wise and constructive course.

McGraw-Hill Publishing Company, Inc.

***Note – A copy of the full report of this survey can be obtained by addressing: Department of Economics, McGraw-Hill Publishing Co., Inc., 330 West 42nd St., New York 36, N. Y.**

UNION IS STILL OUT FRONT

because.... UNION Makes Its Own

Insulated Conduit Bushings!

McGRAW-HILL ELECTRICAL CATALOGS

Top quality and economy go hand and glove with UNION'S integrated production.

All operations under one roof, from raw material to distributors stock.

UNION INSULATING CO.

PARKERSBURG, WEST VIRGINIA

THE TWO E·M·T FITTINGS

THAT ARE EASIER TO USE— SAVE MONEY TOO!

Cross Section Showing Indentations.

Easier to use and neater in appearance, Briegel All-Steel Indenter Fittings not only make stronger connections but also make each job more profitable. Contractors the world over recognize their cost cutting qualities and the fact that they make each wiring job a better job. It is only natural that Briegel Fittings are the most widely used E.M.T. connectors and couplings.

BRIEGEL METHOD TOOL CO.

GALVA, • ILLINOIS

Distributed by

The M. B. Austin Co., Northbrook, Ill.; Clayton Mark & Co., Evanston, Ill.; Clifton Conduit Co., Jersey City, N. J.; General Electric Co., Bridgeport Conn.; The Steelduct Co., Youngstown, Ohio; Enameled Metals, Pittsburgh, Penn. Wagner Malleable Products Co., Decatur, Ill.; Kondu Mfg. Co., Ltd., Preston, Ont.

Helping Contractors Meet Today's Problems

Rules, regulations, ratings and restrictions — these, plus materials shortages, are plaguing contractors, upsetting their market and organizations. Most electrical distributors and salesmen are recognizing their industry obligation by extending their services and helping these good customers

By Howard J. Emerson

NO more important job is being handled now by most electrical supplies distributors and their salesmen than helping their electrical contractor customers meet the variety of problems imposed on them today by a half-war, half-peace economy.

• **Neglect Means Loss** — While this attention to the particular problems of the contractor is but an extension of the normal service that is an inherent function of the distributor, the subject warrants special attention now because there is no indication that the situation for the contractor will revert to a complete peacetime market for at least three years, if then. In the meantime, wholesalers who now are providing the extra service needed in their contractor relationship will have to continue and improve them. And those distributors and salesmen who have neglected or minimized the importance of the services will have to start meeting the situation or face the loss of customers, either to competition or to bankruptcy.

What, basically, is happening at contractor level that warrants the distributor providing attention other than that which he supplies as a normal, sound policy of building business in the contractor market? Says one analyst of the electrical contracting field: ". . . a transition period similar to that experienced in 1941-42 started for the contractor last summer. Today, like any businessman who can no longer work freely in a competitive market where his particular talents are most suited and most profitable, the contractor is in an upset condition where he must try to make the best of a poor situation.

"For a large segment of the contracting industry, the problems are: (1) the serious drop in the residential and commercial building field; (2) the resulting necessity of turning to types of construction and maintenance which may tax the concern's financial, engineering and staff capacity; (3) contract, labor and credit problems resulting from delays in starting, continuing or completing jobs because of materials shortages."

• **Looking over L. A.**—In the following, based on interviews with wholesalers and salesmen in the Los Angeles market area, is a review of the market conditions under which the contractors are forced to work, and a view of how wholesalers are helping.

In December, 1950, in the city of Los Angeles, 2,009 residential building permits were issued. In December, 1951, only 694 similar permits were issued. It is not hard to visualize what the 1952 market means to the hundreds of electrical contractors who have been working exclusively and to capacity on residential wiring since the end of World War II.

• **Big Decision**—Three choices are opened to them: trim their staffs and subsist on what little residential building and remodeling continues; disband and join the staffs of the large contractors whose specialty of industrial construction gives them the largest industrial and military orders; or seek rated orders for military or industrial construction or maintenance as prime or subcontractors.

To the majority of well-managed concerns, the switch-over to industrial or military is the most logical and most practical approach to continuing on an independent and profitable basis. But, where it presents the most opportunity, it also presents the most prob-

lems and the most need for the assistance that distributors can provide.

• **Big Sales Job**—Said one wholesaler: "Our biggest job here is to sell the contractor on selling himself. But we are showing him that he *can* go out and get some of the contracts which he is missing now. We are showing him *why* he must do it. Often, we have to teach him *how* and *where* to get such contracts. We show him that he will be dealing with a different type of purchaser than the speculative builder—that a haggling over price is not the A to Z of selling this new field, that he will have to sell his reputation, his dependability, the quality of his work, his financial stability, etc.

"But that is only the beginning for us when we try to guide a contractor through such a transition. As he hits the new world of ratings and regulations, he may stumble. He is prone to ignore bulletins, hoping that if he doesn't notice them they'll go away. In the meantime, he concentrates on the work, taking a chance that he will keep within the regulations. As his distributor, we have a double interest in correcting that situation. We want him to keep legal and to keep solvent. And a considerable part of the job of our salesmen is to make themselves walking information bureaus, able to pass on to the contractor an intelligent digest of the rules and regulations that apply to his operation."

• **Switch Is Difficult**—As many of the contractors make this transition from residential and light commercial work to the field of industrial and military, it is not infrequent for them to contract for work of a type with which they have had a limited background of experience. They are getting into a part of the electrical construction and maintenance industry that has been handled by that large group of contractors throughout the country who have made this work a specialty.

The problem of the transitional contractor and how wholesalers and salesmen are passing on their experience and knowledge to help him make the transition is best summed up by the report of one Los Angeles salesman:

"One of my best customers had always handled residential tracts. He was a 'bungalow contractor, senior grade.' On a regular call last fall, we discussed the future of house wiring, and we figured that unless he wanted to try for some of the military housing there would be none big enough to keep his organization going at a pace that would keep him in the Cadillac he prefers. I discussed the general market with him and told him about a number of industrial and military jobs that were open for bids or that were in the picture for soon. He asked about other contractors who had switched over to industrial—how they had made out and what problems were involved. I gave him some examples.

"Not long after that, he made the plunge, bid on a part of a large Navy installation up in the mountains, and got the contract. My boss had worked with him on how he would go about reorganizing his crew, setting up a base of operations 100 miles away, also making some changes in his company finance structure more suited to handling a government contract. Then I had worked with him in a couple of ways. First, more or less routine of pricing the materials, then what was of particular interest to him, helping him estimate the time required to handle certain parts of the job which involved work which was considerably different than bungalow wiring.

"From what I know of the goods I was selling and from working with other customers who handle the big stuff all the time, I was able to help him figure extra time on certain parts of the job where the installation would be difficult. Then I spent time with his office staff, showing them what they would have to do about getting ratings and extending them to us, and other things they wanted to know about billing a government job.

"Since work began, I've been up to the job a few times when the contractor or his foreman asked me, mostly on installation problems. The work is going as fast as the supply of materials will permit, the Navy is getting its facilities, and we've still got a good customer. In fact, the order for this job was bigger than any he ever gave me for a bunch of bungalows."

While that represents an extreme in transition, in whole or in part, it shows what wholesalers and their salesmen are doing every day to help those of their contractor customers who are forced today to change over to industrial work in order to survive.

So far this has related to the relationship of wholesalers to those contractors who had been primarily in residential and commercial construction and maintenance. Obviously, the other large group of contractors—those who have had some or a lot of industrial experience—also are caught today in a business world of rules and regulations. And to no less extent, the wholesaler and the salesman are working to help them in their problems.

• **Zest Plus Planning**—Talks with the wholesalers in Los Angeles show that the industry is tackling the biggest problem—the procurement, rating and supply of scarce materials—with the same zest but with more organization and planning than during the height of the war years. While, of course, the distributors can't supply materials they can't get, and they can't allow a contractor materials for which he has no right, there are many ways in which distributor and salesmen are easing the pain of the situation.

One Los Angeles wholesaler states: "I think the best thing we do right now is to meet the contractors on a program of frankness and education. First, we don't kid the contractor that we may have an item in a few days—when we know it is darn unlikely. Why make him wait, hold up his crew, or promise a job—which will cost him money and goodwill—on the chance that we might get an unexpected delivery.

"Some of this problem is the fault of the contractors, however, and through a program of education we are trying to straighten it out. Being anxious to get a particular job, some contractors make promises that are downright foolish in view of what may be expected in materials from the factories. To stop that, our salesmen are kept up-to-date on the supply situation and are given every bit of information we receive from the factories. They are supposed to pass this on to their customers on each call. It is an extra task and it takes time, but we feel that it is necessary to help our contractors make out well in the sort of market they are working in today."

• **Reducing Rashness**—Regarding the contractor's problem of promising completion of a job, another wholesaler says: "We believe we are getting somewhere on this. We are trying to drill into our customers that they must let the general contractor know that a period of time is needed between getting the contract and starting the job, even on top-rated orders. We keep these contractors informed on approximate delivery of the most important items, as well as emphasising to them such regulations as the period given to wire mills to fill orders. The more we get across to them such facts, the less chance of one of them dashing in with

T've got the Zilch contract. It's all 'B' and I'll need 5 reels of this size and a carload of stuff to start my crew working tomorrow.'"

Many smaller contractors have a tendency to try to buy without a rating, either because they think that small construction or maintenance doesn't have a rating, or because it is too much trouble for a small order. One salesman says that much of his time today goes into showing the contractor what ratings he can get and how he should go about extending them. "It is just as important to us and eventually to those customers that we get the rating for a small maintenance job as it is for an industrial construction job, if we want to keep our stock up. It is our job in the field to work with these contractors and their staffs," he says.

• **Smoothing Credit Kinks**—The efforts of distributors and salesmen to help contractors work under today's conditions are directed not only at helping them stay in business, but also in helping them pay their bills. And contractors are meeting credit problems. There's the contractor who was delayed two months because of the shortage of one important item. Sitting on the job were two carloads of conduit. The contractor was expected to pay the wholesaler who already had paid the manufacturer, but the customer was not expected to pay until the job was completed.

Obviously, there are ways in which the wholesaler often can and does get the contractor out of such a tight pinch. But one experienced distributor says that the best possible preventative for such a credit situation is to have a clause in the contract providing for a monthly payment based on the value of the goods delivered to the job. He has been preaching this advice to contractors for more than 10 years—but with little success because "the contractor is afraid that asking for such a clause will lessen his chances of getting the job."

In all those many ways, electrical supplies wholesalers are recognizing the need to help their contractor customers work under the upset economic conditions of today's market, and they are filling their obligation with extra attention and extra services to this market. What it means straight through one wholesaling house—management, departments, salesmen—is seen in the following ELECTRICAL WHOLESALING *photostory*.

Headquarters of Hollywood Wholesale Electric Co., of Hollywood, Calif.

How One Wholesaler Is Adjusted To Meet Contractors' Needs

Hollywood Wholesale Electric Co., of Hollywood, Calif., is typical of the many electrical supplies distributors who have made a special effort to adjust their organizations to meet the needs of those electrical contractor customers who have problems resulting from the regulations, restrictions and shortages that have come with the stepping up of the defense effort. Particularly, it is a good example to those wholesalers who have yet to make the adjustments necessary to provide adequate service to contractors during this emergency period. It is also a good example because it shows that there is nothing spectacular in what Hollywood Wholesale Electric is doing and that no upheaval or house shattering change has taken place. What this wholesaler has done is to recognize the needs of a large group of its customers and then elaborate, expand or add to its normal service so that it could meet those needs. In doing so, this 22-year-old concern has maintained its position as one of the leading electrical supplies distributors in southern California.

To See How Hollywood Wholesale Electric Is Increasing Services to Contractors, Turn Page ➡

OPEN-DOOR POLICY, beginning in the office of President Howard Stultz as he welcomes an unannounced contractor bearing a problem, indicates the attitude that must reach down through a firm as it considers customers' problems.

SOUND FINANCIAL STRUCTURE, for both the wholesaler and the customer, is the basic reason for a policy of working closely with contractors. Here Treasurer William Edwards makes a credit decision for Salesman Guy Carleton (left).

Special Service for Contractors

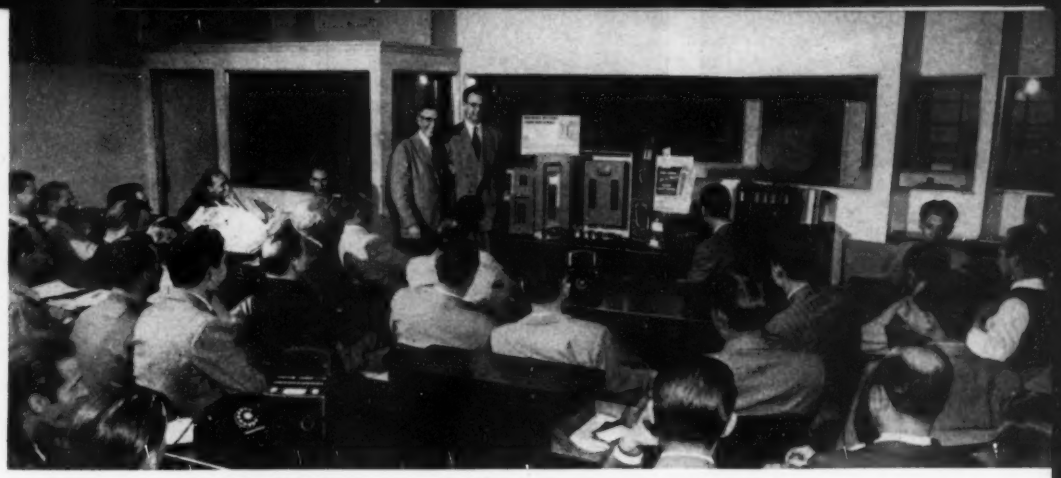
How One Wholesaler Is Adjusted To Meet Contractors' Needs (cont.)

In any electrical wholesaling house, management has two choices when regulations, restrictions and materials shortages place serious problems on all

As a Result, Every Staff Function

PURCHASING is geared to help contractors meet a changing market. E. A. Hall has to know changes in customers' jobs, has to anticipate their demands, know where to get essential materials and tries every means to keep adequate stocks.

EXPEDITING is set up as an adjunct to purchasing, thus helping to get speedy delivery of goods contractors need to keep crews busy. Hollywood Wholesale has Bernice Irving (with Hall above) constantly seeking deliveries.



ALERT MANAGEMENT, as exemplified by Jack Bisset, vice president and sales manager (standing left), coordinates company policy with operations, keeps staff up-to-date on market conditions and on supply situation at such regular meetings as above, where he introduces a representative from BullDog Electric Products Co.

Starts with Policies from "Top Side"

types of contractors. Fortunately, the "so what, we can sell anything" attitude is not too common. The attitude of leading wholesalers, such as Hollywood Wholesale Electric, has been one of both personal consideration of the customers' problems and willingness to provide the extra services.

Feels and Fills Contractors' Needs

OFFICE MANAGEMENT is attuned to a market ruled by ratings and regulations. Trained personnel, like Shirley Miller, who discusses latest problem with Controller Harley Hunt, can easily handle ratings and up-to-date office machines.

ACCURATE, COMPLETE RECORDS enable Hollywood Wholesale to work closely with contractors. Joyce Benson, on this NCR 3100, keeps records that quickly show Bill Edwards status of an account before he makes a call to discuss credit.

COUNTER SALESMEN safeguard contractors' future by watching ratings, or, as Lyle Horn is doing, phoning contractor to get rating.

SPECIAL DEPARTMENTS keep informed on contractors' market. J. H. Dieffenwierth, lighting specialist, discusses market for Stonco lamp with assistants, Earl Gilmore, Barry Ybarra.

WILL CALL DESK works with contractors on materials problems. Here Joe Blair shows what substitutions have to be made to complete phoned order.

How One Wholesaler Is Adjusted To Meet Contractors' Needs (cont.)

PHONE SALESMEN know what's in stock, how soon stock can be expected as they deal hourly with contractors. Dan Corley gets latest facts from Art Cook. Leo Baughman is in background.

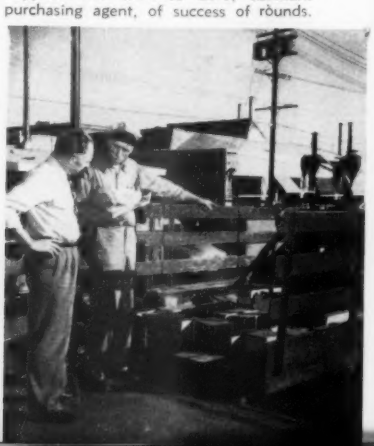
QUOTATION MEN have more than prices to consider. Big price books ease pricing job, leave Dean Kline and Bob Hinz time to consider job's priority.

And Extra Functions Are Added

CUSTOMER RELATIONS have increased in importance. Visiting contractor discusses job problems with Sales Manager Bisset.

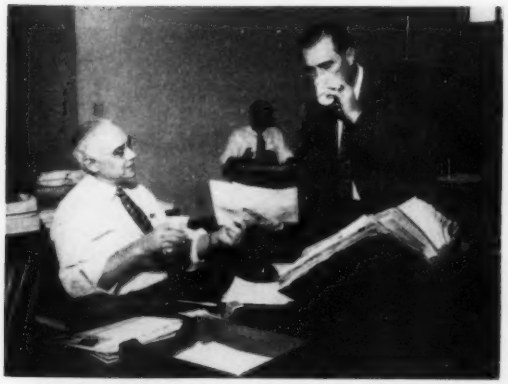
SUBSTITUTIONS, properly arranged, help contractors get jobs. Art Cook (right), specialist on substitutions, gets receiving invoices, tries to arrange to fill BO's with goods available.

LOCAL BUYING from jobbers, manufacturers helps find scarce items. Leonard Leppert tells Clarence Lord, assistant purchasing agent, of success of rounds.



Helping Contractors Solve Problems Keeps the Salesman Alert and Busy

Extending out from Hollywood Wholesale Electric, and any other house that is meeting the needs of its contractor customers, are the salesmen—the vital link between a big organization and the individual customer. Once again in a little over a decade, these salesmen have been cast in the role of counselor and guide, expert and expediter, with the taking of an order the end result of many actions other than the presentation of a product and price story. What is expected of the wholesaler's salesman today if he attempts to provide the extra services needed in his contractor market is seen in this picture coverage of Monie Hultgren, of Hollywood Wholesale Electric, before and during a call on a large Los Angeles electrical contracting and construction firm.



CLOSER COORDINATION of work of inside and outside salesmen has been accentuated as contractors need more help to meet market conditions. During coffee break, Hultgren checks a customer's problem with Bill Bateman, inside salesman.

POLICIES AND PRACTICES of his firm as they affect his outside work and his relations with customers are made known to Hultgren, who is in regular contact with Sales Manager Bisset, here passing on the digest of a new NPA order.

Hultgren Has To Know All the Answers

EDUCATION of a wholesaler's salesman to meet conditions contractor customers work under begins with study of manufacturers' releases, market bulletins and trade publications. Between calls, Salesman Monie Hultgren studies regularly.

STOCK is what keeps his customers going, so Hultgren regularly spends time with Al Boyd, warehouseman, so that he knows what has come in and what small changes may have shown up in newly-arrived stock at Hollywood Wholesale.

INTRODUCING NEW PRODUCTS that will open markets for the contractor is a routine service on such calls as this at Hill Electric Co. Vice President Bill Hill looks on as Hultgren shows fixture to President Sid Hill.

PRIORITY records and invoices have become important to the contractor. With regulations on time, he must hold them in his file. Hultgren is consulted frequently. He discusses Hill Electric file system, and will use ideas he picks up to help other customers.

How One Wholesaler Is Adjusted To Meet Contractors' Needs (cont.)

In the Field, Hultgren Is Guide, Counselor, Textbook and Instructor

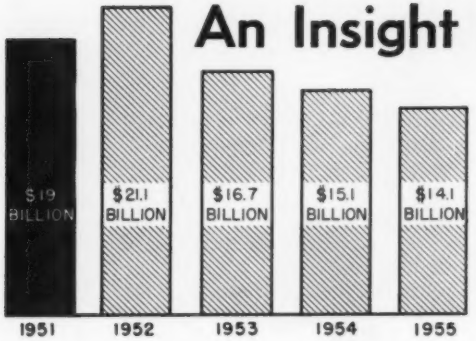
ENGINEERING ADVICE is a regular service. Hultgren shows adaptability of armored cable to problem facing Archie Morton, Hill superintendent.

INVENTORY at contractor level has been upset by change to new types of work. Hultgren ponders chances of Norris Kitchen getting scarce items.

ESTIMATING HELP is needed more today by Hultgren's customers as they seek new types of jobs in a market upset by materials shortages, regulations and ratings. He gives help here to Paul Diederich, Hill salesman.

MARKET INFORMATION is passed on by Hultgren, and is eagerly sought by contractors to supplement their own sources and experiences. While at Hill Electric Co., Hultgren relays to Sid Hill the latest information on pipe supply and other equipment.

An Insight into Your 1952-55 Industrial Market



Peak of capital expenditures for expansion will be reached in 1952, but will gradually taper off to a relatively high level for a good many years to come

HOW many more years will industry keep shelling out record billions for new plants and equipment? So far as this year is concerned, another new record will be set. Companies then plan to lay out more for capital goods — $21.1 billion — than ever before in history.

That's expected, all agree, since this year will be the high-water mark in what has been the greatest wave of expansion in the U. S. But what about post-1952, when mobilization expansion is likely to have passed its peak? These figures can answer that question: preliminary plans right now point to a total of $16.7 billion in capital expenditures in 1953; $15.1 billion in 1954; and $14.1 billion in 1955—a level well above pre-Korean years.

• **Survey Concludes**—In other words, industry still has huge plans for expansion and replacement and modernization. That's the main conclusion of the fifth annual survey of industry spending plans completed last month by the McGraw-Hill Department of Economics.

The survey, covering firms accounting for over 60 per cent of employment in the industries where capital investment is highest, reports that plans for expenditures by industry in 1952 call for a jump in dollar outlays of 13 per cent over last year. This 13 per cent jump is by no means uniform throughout industry. In electrical manufacturing—involving plants making both defense items and regular products—the increase will be more than 100 per cent. In transportation it will be a modest 8 per cent. Some industries will actually spend less in 1952.

Unquestionably, 1952 is the big year for defense-supporting expansion. It started in 1951, but the biggest defense projects got going late and completion was pushed off into 1952.

• **Mining Tops**—Within the major industry groupings, the biggest increases in capital spending this year are in mining (17 per cent) and manufacturing (16 per cent), where defense expansion is heaviest. Electric and gas utilities plan a 7 per cent increase.

Manufacturing industries will spend $12.9 billion to replace old equipment and build new factories. The biggest spending will come from the oil companies—a 38 per cent increase over 1951 to $2.8 billion. Transportation equipment — dominated by defense-swollen aircraft—shows a 78 per cent increase. In steel, spending is up 25 per cent; in chemicals, the rise is 16 per cent. Autos and machinery will approximate last year's spending.

• **Expansion Ratio Drops** — This year there won't be as much concentration on expansion as there was in 1951. Last January, companies planned to put 58¢ of every investment dollar into expansion. Now only 52¢ is earmarked for 1952. Even though expansion in defense industries is tremendous, in other industries the shift is to modernization. Food and textile industries are ticketing three fourths of their 1952 spending for replacement and modernization. Apparel and furniture companies plan to spend nothing for expansion.

Money isn't the big question in 1952. Companies generally have—or can get enough money to carry through their investment plans. Four out of five approached by McGraw-Hill said they intend to finance entirely out of retained earnings, depreciation and reserves—no outside money.

• **After Mobilization—What?**—Industry already has plans for substantial capital spending in the years to follow mobilization. They add up to considerably less than the super-boom expected this year, but there's already more new plants on the drawing boards for 1955 than was installed in any year before 1951.

McGraw-Hill asked business men how much they would spend in 1953-55. Here's what their company plans show:

• Capital expenditures will start down in 1953. The big drop will be in defense industries. These companies may be producing a lot of defense goods in 1953, but their plant expansion will be largely finished this year.

• In some fields, particularly defense-supporting industries, expansion will carry over into 1953.

• In non-defense lines, the adjustment to lower capital spending will come this year. But if profits pick up, spending stands a fair chance of rising above plans later in 1952 and in the future.

• The utility group looks like a sure bet to hold up well. Electric utilities, particularly, plan to continue their present spending pace through 1954.

• Mining companies are making unusual outlays right now to develop new sources of supply. They don't count on it to continue, however.

• **Not So Sharp**—So when you add it all up, you get industry spending 20 per cent less than 1952 in 1953; 33 per cent less by 1955. But neither drop is likely to be that sharp. As more plans take form, 1953 could easily come within 10 to 15 per cent of the 1952 level; 1955 might be off no more than 20 to 25 per cent. If this holds true, we'll have the foundation for a relatively high level of business, if not the hectic boom of mobilization.

Prepare For Progress And Success Will Follow

PART III

WHAT do you do if the prospect says *no*. Believe it or not, it depends on how he says that *no*. It doesn't take a salesman long to learn that a customer can say *no!* or *no?*

Your customer is subjected to the sales story of many representatives each day. Some of the salesmen approaching him have a useful product and an interesting sales presentation, while others have neither an effective story to tell nor a good product. In many instances prospective buyers have developed an almost automatic *no* as a defense against the latter group.

Probably every salesman has had the experience of presenting a sales story and having the prospect actually say *no* in one breath and, a moment later, ask if the salesman really meant the product could do this or that.

One of the most important keys to successful selling is the salesman's knowledge of customer inhibitions. Too often the reasons and doubts posed by a prospective buyer are assumed to be objections. The salesman reports that he argued for the sale but the buyer objected for this reason or that, or wanted certain special conditions. Actually, many salesmen lose ground by assuming an objection whereas the customer has expressed certain unanswered questions that have not been included in even the most carefully-prepared presentation.

The professional salesman recognizes these inhibitions and proceeds to remove them one by one. A word of caution is expedient at this point. Salesmen have been known to encourage a prospective buyer to voice his "objections" during the sales presentation. The salesman is confident that he has an answer that will overwhelm the buyer and he wants to use it—even if he has to create a proper opening.

Sales presentations built on a "give and take" basis are easier to prepare and are often used by a salesman who has unusual confidence in his ability to come up with the right answer. In some instances, this technique may be successful. But in the majority of cases, the salesman is far ahead if he has carefully built into his presentation as many answers as possible to the stumbling blocks he expects to encounter.

He has anticipated the objections and eliminated the possibility that the prospect, in voicing an "objection," might fix it in his mind to such an extent that the salesman loses the sale.

How do you handle price "objections." Nine times out of ten, price is the single factor that prevents a successful sale. Most experts advise salesmen to avoid all discussion of prices until the end of the presentation. Even if the prospective purchaser requests it, the salesman is told to avoid quoting prices—at least until he has carefully built the value of the products.

"Tell him we're not giving any more such special discounts—we've got more than are good for my ulcers now!"

In most instances a salesman selling at the wholesale level should not permit his sales presentation to become involved with prices until he is ready to close. It is felt that a discussion of prices tends to lead the sale to a conclusion between the wholesaler salesman's customer and himself.

Earlier in this series it was emphasized that the actual sale of a product is one step beyond the wholesaler salesman's work. In selling his products the wholesaler salesman must at the same time show the contractor and dealer where and how they can recommend them on a job or sell the products to the consumer. The wholesaler salesman should stress the profit possibilities and feature the benefits to the prospective buyer.

Here, briefly, are a few factors which the salesman should review in order to avoid turndowns.

- Be willing to give a little in meeting a buyer's objections. Don't antagonize him or kill the sale by expressing "you're wrong"—even though you know he is. Be willing to agree partially and bring in the big guns of your sales talk to overcome his objection.
- If you try to convince him by relating the experiences of other satisfied users or buyers, be careful that you don't outclass him by mentioning operations much bigger than his.
- Remember that your buyer is independent too—make him think for himself.
- Review the special features and unusual factors of the products and your service.
- Climax is reached when the salesmen is sure that the customer wants to buy—don't ruin it by trying to "make sure." Go into a closing immediately. It takes practice and careful observation to know when to commence trying to close the sale and ask for the order.

Buyer Resistance Is No Stone Wall . . .

. . . in the path of sales if you use the three time-tested ways of handling buyer resistance on some of the more frequent objections you may meet in today's market

By Edmund Mottershead

MANAGEMENT today is burning the midnight oil to figure out what to do next under present defense "boom" and change-over conditions. Many sales organizations have been rebuilt from the ground up in the past three years. Others have felt a serious tightening up of policy all the way down the line. Many more are shrinking the territories of field salesmen with a view towards hiring more men and cultivating the field more intensively. Now they must plan to hold their sales organizations together in the face of rapidly changing business conditions.

In the midst of this activity, sales manuals, sales tools and sales training in basic selling fundamentals all have come to play an important part. But regardless of product training, territory management training, policy training, and consistent field supervision by experienced salesmen and field supervisors, there are certain elements of sales "know-how" which new salesmen grope for and which many older men have neglected. Among them is the ability to handle objections.

• **Not All Valid**—Every salesman has encountered sales resistance—the objections that prospects and potential buyers put up as a screen for their real or imaginary reasons for not buying. Sometimes these objections are real; frequently they are not. We cannot go so far as to say that people intentionally give false reasons for not buying. But many of the objections they offer are not valid, while the real reason, often unconscious, lies hidden.

The real problem is not the validity or the honesty of the objection put forward by the buyer. The real problem is what to do about it. His objection must be met and overcome. It must be removed, not merely beaten down temporarily—to raise again later on. Objections must be met in such a way that the buyer is hardly aware of what is going on except that he has somehow changed his mind—voluntarily. Whether the objections are real or false, factual or imaginary, they are real to the prospect, and must be treated as such by the successful field salesman.

• **Three "Outs"—You're Safe**—There are three main techniques in common use for overcoming objections: direct rebuttal, the "yes-BUT" method, and what we call the "boomerang."

In its simplest form, the direct rebuttal method of overcoming objections says: "You're nuts!" or "You're a liar!" and the man who shouts the loudest and carries the biggest club wins that round. In a more polite form, direct rebuttal really says: "To the contrary, you really want to buy this item in spite of your objection."

But you can't browbeat a buyer into action. You can't change his mind or activate his emotions by winning an argument. The old jingle says: "A man convinced against his will is of the same opinion still." So, get back to first principles. The big secret in selling is to make the buyer act as you want him to *because he wants to do it.*

• **All Buts About It**—The "yes-BUT" technique is a little more tactful. It is perhaps most often used by people who are making a conscientious and sometimes obvious effort to be tactful. In essence it says: "There is no doubt a lot of truth in what you say, and you have undoubtedly given the matter a lot of thought, BUT here is a factor which you have not considered, and because of it, you

Your Guide To Hurdling Sales Objections

"I want time to think over your proposition."

"We can't undertake any more expenditures now."

"I'm waiting to see how conditions will be."

	"I want time to think over your proposition."	"We can't undertake any more expenditures now."	"I'm waiting to see how conditions will be."
Boomerang	√ "I'm sure you'll agree, the time to think about this proposal is now, while I'm here."	√ "Here is an opportunity which will make available more cash for that program you anticipate."	
Yes–BUT			√ "BUT regardless of conditions, you'll have to stay in business and try to make profits."
Direct Rebuttal			√ "A man in your responsible position can't afford to wait and see what others will do."

should listen to my proposition and do so and so . . ."

This method gives the buyer credit for being sincere, credit for having some sense and some intelligence, admits the weight of the objection, but counterbalances it with new facts or another idea.

The "boomerang" is the method that really rings the bell. The salesman has to be always alert to use it and not every sales interview creates the opportunity. One fellow doesn't want to buy insurance because he's lucky—he had seven narrow escapes last year. That's just the reason he should buy it *now*. By the law of averages, his luck is just about to run out.

• **Complete About-face**—The secret of the "boomerang" is that it converts the man's objection into his primary reason for buying. He is afraid we can't make deliveries; our firm has a better record for making deliveries than any other and we guarantee delivery against a penalty, so he can't miss. He has had bad experience with shoddy merchandise in some shipments; we're selfish people too, and we can't afford to lose money because of it.

There are of course many objections and variations of objections encountered by the men on the firing line. Yet a few of the more common reduce to generalizations that can easily be deflated with pin-point probing. Let's see how some experienced field men handle them:

"I want time to think over your proposition."

In some cases, the buyer who "wants time to think it over" has some other reason for delaying action. Analyze the situation and, if possible, find out what that reason is. He may want to check your offer with the experience of another customer of yours; he may be holding another offer behind his back while getting information from you; he may simply be picking your brains while intending to buy elsewhere. Smoke him out.

"I want you to have all the time you need to think it over, Mr. Jones. Are there some points that I have not made clear or where I can give you more information? If so, I'd appreciate your questions now, because I'm sure you'll agree with me that the time to think about this proposal is now, while I'm here to answer your questions and help you with the problem.

The boomerang is: *"Now* is the time to think because I'm here to help you *now*."

"Our company is buying heavily in other lines right now and we can't undertake any more expenditures at this time."

"I realize, Mr. Jones, that your company is undertaking a very heavy program right now, and that it can use every available dollar for present commitments. Here is an opportunity for quick profits, fast turnover, which will make available more cash to help handle that program you're talking about."

The boomerang: his objection becomes his main reason for buying *now*.

"I want to wait and see what business conditions will be six months from now."

"Mr. Jones, an executive in your responsible position can't afford to wait and see what the other fellow is doing. Our competitive market today means that we must, each one of us, be a jump ahead of the competition if we are to bring home the bacon. We have to predict the future as best we can with the facts we have. After all, all business is essentially speculative; there's a risk in it. That's what we get paid for, taking risks. I think that going ahead right now would be the best decision you could make under the circumstances."

The direct rebuttal politely tells the man he is ducking his responsibility to make a decision.

You could attack the same objection in this manner: "Mr. Jones, I can't blame you for not wanting to wait a bit until conditions clarify themselves. We don't know whether there will be a depression, more inflation, or an atom bomb blast tonight. BUT, we do know that regardless of 'conditions' we are going to have to stay in business and try to make a profit. Now this proposal is an opportunity for your company, etc. . . ."

The "yes-BUT" swings his thinking to his real need to decide.

"I'll talk it over with my associates."

√ "Yes, BUT take me with you so I can help discuss this important matter with them."

"Too many changes in top personnel are due."

√ "Even if somebody else takes over, the policies of your company won't change overnight."

"Your competitor has been serving our needs."

√ "Undoubtedly they are good, BUT we're prepared to do a better job to serve your wants."

"Your proposition is fine, but the price is high."

√ "I'm not selling just a product, I'm offering performance, service, reliability, results."

"I'll have to talk this matter over with my associates."

"Mr. Jones, let me ask you a favor: you've given me an hour of your time this morning, and have listened carefully to my story. I think you have a fine understanding of what my company has to offer you. I have spent ten years representing my company which specializes in doing what we propose to do for you. I can't expect you to answer all the questions your associates might raise with only an hour's preparation. Could you call them in here, or take me with you to see them while I'm here? I can help you discuss this with them."

The "yes-BUT" says: "I wish you *would* talk it over with your associates, BUT let me help you talk to them."

"There are a lot of changes in top personnel taking place right now, and I can't commit the company to anything at this time."

"Mr. Jones, I have been doing business with you for two years now, and I have always thought you were a man who felt very strongly the responsibilities of his position, wanted to make the right decisions for the company at all times. You know what this proposal means for your company. With your background, you probably know better than any new man just what would be the right decision. Whether you stay where you are, or some other individual takes over another executive job with your organization, the basic policies of your company are not going to be changed overnight. If you accept this proposal now, whatever happens, you will have done the right thing.

The boomerang: "The best thing for your company regardless of changes in personnel."

"We already have everything we need in that line. The XYZ Company has been serving us for years."

"Undoubtedly, Mr. Jones, the product you have been buying from the XYZ Company has been satisfactory to you, or you wouldn't still be buying from them. I wouldn't recommend that you make any change just for the sake of changing or because you like the way I part my hair. My interest, and yours, is getting the best deal for your company. Now we know that you must have quality, performance, reliable service, manufacturers' guarantees, a good price, split billing, split deliveries and overnight service on replacements. BUT I don't believe that if the XYZ Company, or anyone else, were giving you all that you would be talking to me today. There are eight basic requirements of your situation, and I believe that my company is the only one that can give you all of them."

The "yes-BUT" says: "They're good, BUT we're better."

"Your proposition is wonderful, but the price is much too high."

"Mr. Jones, let's be realistic. You've been in business as long as I have, if not longer. I could give you a lot of bunk to the effect that when you buy our product you are not spending, you're investing; you're not buying a higher-priced package, but one which will give you a better value and much more economy in the long run. You know all the arguments—you listen to them every day. Let's look at it this way: in this life you get just what you pay for. You get out of life just what you put into it. Your company is a leader in its field, not because it puts out better merchandise, but because it is selling satisfaction, results, convenience, security, the personal satisfaction of its customers. Lots of companies sell the same sort of things that mine does. But I'm not selling just a product. I'm offering you performance, reliability, service.

The boomerang: the higher price has behind it hidden values—which are the basic reasons why the prospect needs your product.

• **Welcome Resistance**—There are lots of other objections and other answers, varying with the details of a given business and particular sales situation. The important thing is to welcome objections as an opportunity to get closer to the buyer's problems, to arrive at a better understanding of his real needs, and to convince him that you are on his side of the table mutually helping him to solve his problems.

Don't Overlook Sales To Small Business

Its slice of the defense pie still isn't as large as the big fellow's, but it has run up its volume by picking up a lot of subcontracting from large prime contractors. Spread of government orders over broad industrial base also puts more contracts in the hands of the little guy

SMALL BUSINESS VS LARGE
Percentage Breakdown of

FOOD & KINDRED PRODUCTS
Number of Certificates %
Proposed Investment %
TEXTILE MILL PRODUCTS
Number of Certificates %
Proposed Investment %
MACHINERY EXCEPT ELECTRICAL
Number of Certificates %
Proposed Investment %
ELECTRICAL MACHINERY
Number of Certificates %
Proposed Investment %
MOTOR VEHICLES & EQUIPMENT
Number of Certificates %
Proposed Investment %
RAILROAD EQUIPMENT
Number of Certificates %
Proposed Investment %
RUBBER PRODUCTS
Number of Certificates %
Proposed Investment %
STONE, CLAY & GLASS PRODUCTS
Number of Certificates %
Proposed Investment %
Source: Defense Production Administration

IN looking over the field for potential customers, don't ignore small business by concentrating all of your major sales efforts on big business. Small business today is getting its share of the defense pie. Its slice still isn't as large as big business, but concentration of military orders in large corporations is less during this present crisis than during World War II.

Here's what has happened to up the share of small business in the defense effort. The main difference this time is that small business is picking up a lot of subcontracting from large prime contractors. This, points out McGraw-Hill's Department of Economics, may add up to as much as 20 per cent of the total value of all prime contracts.

• **Opposite Trend Sought**—A little more than a year ago, the Senate Select Committee on Small Business complained that since Korea "the weight of production has rested with fewer and fewer large companies." The committee declared that the "trend of concentration of defense contracts must be immediately reversed and defense contracts spread widely in industry" throughout the nation.

Actually, the trend was away from concentration of military orders in large corporations, especially when subcontracts are taken into consideration.

A comparison was recently made by the Munitions Board, which coordinates spending by all three services, between prime military contracts in fiscal 1951 and those awarded during World War II. In the last war, the 100 largest contractors received 67 per cent of the total value of contracts. In fiscal 1951, the 100 largest contractors accounted for only 61.5 per cent. The top 50 companies during World War II received some 58 per cent of all prime contract dollars. In the July 1, 1950, to June 30, 1951, period the top 50 companies accounted for 54 per cent of the total. This represents a drop of over 5 per cent in the total value of contracts going to the top 100 companies, and a 4 per cent drop in prime contract dollars going to the top 50 companies.

• **Share May Increase**—The Munitions Board also reports firms employing fewer than 500 persons got prime contracts amounting to $6.5 billion during fiscal 1951, or 21 per cent of the value of all prime contracts. Smaller companies in the future may come in for an ever larger share of prime contracts because of the government's effort to spread defense contracts over a broader industrial base.

While small business gets 21 per cent of prime contracts, it is estimated that an additional 20 per cent of all prime contracts is picked up by small business in subcontracts from large contractors.

Some examples of these subcontracts, as reported by the Munitions Board, are:

• Examination of 13 large Army contracts shows about 42 per cent of the total value went to small business. Most work was done by the prime contractor and by the first tier of subcontractors. But small firms in the second, third and succeeding tiers received almost half the amount placed with the larger firms in the first tier.

• Republic Aviation Corp. held on to about 48 per cent of Air Force contract dollars received in fiscal 1951. The other 52 per cent was handed

IN SELECTED INDUSTRIES*
Certificates of Necessity
*through Aug. 18, 1951

Size of firm by number of employees per company				
Under 500	500-2,499	2,500 and over	Unclassified	Total
75	22	3		100
31	45	24		100
36	24	28	12	100
15	43	30	12	100
62	21	14	3	100
26	33	40	1	100
48	22	27	3	100
23	24	52	1	100
46	36	18		100
10	10	80		100
30	50	20		100
45	24	31		100
39	16	42	3	100
29	36	35		100
34	24	35	7	100
20	18	51	11	100

down to other firms. Large and small suppliers of materials, equipment and services received 17 per cent, and 35 per cent went for subcontracted parts and components. Of Republic's 176 first tier contractors, 133 are small. The four largest first tier subcontractors report they subcontracted to 85 additional small firms and 14 larger ones.

• General Electric, in a study of subcontracting operations at its Aircraft Gas Turbine Division plants at Lynn, Mass., and Lockland, Ohio, found it kept only 33 per cent of the prime contract dollars while giving the other 67 per cent to 4,070 outside firms.

Surveys of 900 of these first tier suppliers indicate that 80 per cent employ less than 500 persons. Another report on 429 of the more than 4,000 firms shows they did business with 65,000 other firms, of which 49,500 were classed as small business.

• **Small Business Aided**—A number of positive measures to help small business have been taken by the Commerce Department since the beginning of the defense program. Concrete steps taken by the department since the government first began to spread defense contracts over a broader industrial base have been taken chiefly through the National Production Authority. These steps include:

• Assuring small manufacturers of supplies of critical materials.

• Developing planned procurement to aid firms receiving low allotments of controlled materials.

• Encouraging smaller firms to form production pools.

• Developing policies to preserve small manufacturers dependent on copper and aluminum.

The most important government aid given small business is the certificate of necessity. It gives the small company materials priorities for new construction and the right to a five-year write-off for tax purposes. Small business, recent figures on certificates of necessity indicate, is getting more such aid now than in the immediate post-Korea period. Companies with 500 employees or less got 47 per cent of the certificates issued during the six-week period ending August 18, 1951. During the period from November, 1950, to July, 1951, less than 40 per cent of the certificates were received by small companies. These figures indicate that the larger firms' share of certificates declined about 7 per cent. Large companies with over 2,500 employees got 37 per cent of the certificates but they accounted for 74 per cent of the $8.2 billion proposed investment certified for rapid amortization from November, 1950, to August 18, 1951.

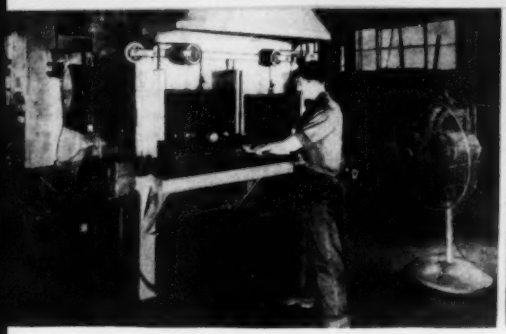
• **Loans Available**—Another form of government aid currently being given to small business is loans. Small business has been getting about 30 per cent of the government or government-guaranteed loans. More than 90 per cent of the total number of Reconstruction Finance Corp.'s regular business loans have been for $100,000 or less. RFC officials report that during fiscal 1951 almost all of the $285 million lent went to small business.

McGraw-Hill's Department of Economics points out that the big companies getting large defense contracts during World War II are not necessarily among the top 100 today. Of the 100 leaders during the war, 43 are not in the first hundred now.

Among those missing are shipbuilders and steel companies with shipbuilding affiliates, as the shipbuilding program is fairly small today. During World War II, Todd Shipyards, for example, ranked 26th, but it is not among the first 100 today. Newport News Shipbuilding was formerly 23rd. It is now only 65th. U. S. Steel slipped 41 places from its 16th spot, and Bethlehem, ranked 7th, is now 80th.

• **GM Still Ahead**—New leaders of the list are such firms as Northrup Aircraft, up from 100th place to 19th; American Locomotive, which jumped from 34th to 7th; International Harvester, with a move from 33rd to 11th; and American Woolen, with a leap from 51st to 20th. General Motors, largest peacetime manufacturer of durable goods, is also biggest military prime contractor. The firm got about 8 per cent of the prime contracts' total value. The next ten companies on the list are all up from the last war's listing.

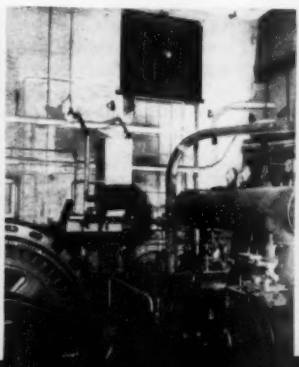
Small business' share of defense orders, its share of certificates of necessity for expanding defense facilities, and small business' defense loans all point to a trend of increasing defense industry for little companies. Pushing sales to small business can now mean big business for you.

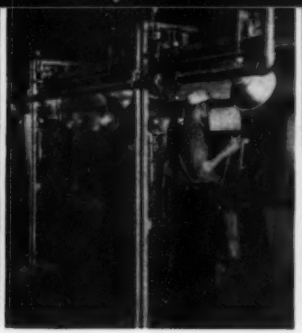


MARKET	Spot cooling fans for especially hot industrial tasks.	Fans and ventilating equipment for churches.	Exhaust fans for hotel and restaurant kitchens, and diners.
CUSTOMER BENEFITS	Intense heat generated by certain machines and operations is continually dissipated so that workers, such as the one shown above handling white-hot rods do not become overly fatigued before they complete their shifts. In such instances, ventilating equipment promotes greater efficiency and job satisfaction.	When it's hot outdoors, the presence of many people can make it even hotter indoors. This is particularly true of churches. Parishioners will be more comfortable when air is forcibly circulated throughout the church. And they probably will attend in greater numbers.	Preparation of food becomes a pleasanter task when heat and odors are not permitted to accumulate. Cooks and kitchen help are more likely to be satisfied with their jobs. And occasional diner customers are more apt to become regular patrons when they don't have to face cooking heat and fumes.
SPECIAL KNOW-HOW	If air over motor exceeds normal temperatures, use Class B insulated motor, provide external cooling or mount motor out of the air stream.	Spring mounted, slow speed, belt driven fans should be used where extremely quiet operation is required, such as in churches.	Exhaust fans should be located so that they collect heat and fumes as near as possible to their source of generation.

Condensed Selling Data

MARKET	Air circulators and ventilating equipment for stores.	Ventilating systems for boiler and engine rooms.	Air circulators for offices.
CUSTOMER BENEFITS	People shun stores that are hot and poorly ventilated. But stores equipped with fans can attract customers even on the hottest days. Store sales personnel, too, benefit from electric ventilation: the cooling effect of moving air helps maintain their mental alertness, enabling them to sell more effectively.	The tremendous heat generated in boiler and engine rooms acts as a drain on the efficiency of workers. And the large amounts of moisture given off into the air hasten the deterioration of machinery and buildings. Both of these expensive and unnecessary conditions can be eliminated by means of a ventilating system.	By stirring up hot, humid air, fans accelerate the evaporation process at the skin's surface, thereby helping office personnel keep cool. This cuts down heat induced lethargy and clerical errors, and maintains white collar workers' morale — the top consideration with today's shortage of skilled clerical workers.
SPECIAL KNOW-HOW	Where more than one fan is installed or placed for moving air in a particular area, be sure they are positioned to eliminate all dead air spaces.	Where steam and excessive heat are to be exhausted, fans should be installed near the ceiling at the opposite end of the room from the intake openings.	It is best to place fans on the floor so that they produce horizontal air velocities below desk top level. Desired cooling is obtained without disturbing papers.





Attic fans to builders, also to dealers for resale to homeowners.	Exhaust fan systems for industrial spray booths.	Window fans to dealers for resale, also to apartment owners.	**MARKET**
An attic fan creates a high rate of air change to carry away accumulated daytime heat in the home; fills the entire house with cooler night air, promoting restful sleep; and leaves the home adequately cooled so that lower temperatures prevail throughout the following day.	When spray booths are equipped with the proper exhaust systems, workers do not inhale any of the fine spray nor does their clothing become coated with it. As a result, industrial sickness is cut down (also disability compensation) and morale and efficiency are maintained.	Window fans are effective room and apartment ventilators. If used almost continuously during the summer, they can take the blast furnace effect out of housework by day and make sleep more restful at night. To apartment owners, they offer the economic advantage of helping to attract and keep better tenants.	**CUSTOMER BENEFITS**
Be sure that the fan selected is adequate for the job. A unit of insufficient capacity exhausts too little air, may prove to be an economic waste.	Where fans are used for exhausting inflammable gases or fumes, explosion-proof motors should be used in conjunction with non-sparking blades.	For full efficiency, don't place exhaust fans in front of window screening. Conventional screening will reduce relative fan output as much as 50 per cent.	**SPECIAL KNOW-HOW**

For Twelve Fan Markets

Kitchen fans to home builders, contractors and dealers.	Exhaust fans for locker rooms and lavatories.	Air circulating equipment for crowded factory floors.	**MARKET**
Any home is more saleable with a kitchen fan as a feature. Hot weather or cold, the kitchen fan helps the housewife. Removing odors, fumes (an average of 3 to 5 quarts of grease a year) and cooking heats are its year-'round benefits. Ridding the kitchen of summer heat is an important "extra."	Exhaust fans in these locations remove steam, odors and foul air. In locker rooms where wood rather than a water-resistant material comprises the wall surface (such as in the one shown below), forced ventilation helps preserve the structure.	Summer heat is a scourge in improperly ventilated factories. It discourages good workmanship and encourages absenteeism and labor turnover—problems your defense sub-contracting customers, in particular, want to hold to a minimum. The answer to these and other hot weather troubles is the right air moving equipment.	**CUSTOMER BENEFITS**
Where possible, always install a kitchen exhaust fan on the lee side of the house—the opposite side from the prevailing winds.	Fans should be located with respect to the intake area so that a maximum scavenging effect will be obtained by fresh air sweeping through the room.	Several smaller fans should be used in place of one big one in ventilating large areas. These should be placed so that obstacles don't deflect air currents.	**SPECIAL KNOW-HOW**

They Sell Fans For All-Year Use

Salesmen for U. S. Electrical Supply see lots of room in the fan market for many applications unrelated to the weather. At every stop, they demonstrate this new idea in modern living

By Thomas F. Preston

JACK TUCKER, co-owner of the company, briefs two of the firm's salesmen on additional year-round fan applications.

"TO SELL more fans today, we've got to strike out against the old theory that fans are still a seasonal item—to be used only during the summer months and then packed away in moth balls for the rest of the year." That's the way Jack Tucker of U. S. Electrical Supply Co., New York, feels about the present fan market setup. He's been out in the field trying to crush that old attitude for quite a few years now.

What Jack Tucker aims to inject into his fan merchandising program instead is the use of fans for year-round comfort and health, and not for summer alone. It is a new idea in step with modern living. Too few people know of the many ways fans can make their homes more pleasant in all seasons of the year.

The market for these off-season applications has been laying partially untouched up until a few years ago. Now it's opening up wide enough to make room for a selling plan that knows no season. But it's up to the distributor's salesman to cultivate and strengthen that market.

• **Weather Factors**—In the early days, fan ventilating equipment was called a "comfort" item; today it still is. It was tagged as a seasonal item; in many instances, it is still being sold according to the weather. Yet, Jack Tucker, and other far-sighted distributors, see room in the fan market for many applications unrelated to the changeable summer temperatures.

When he surveyed the fan market in his territory, Jack Tucker found, as most others had, that the only real difference between a fan and an appliance merchandising program lay in this comfort factor. Although appliances likewise serve a comfort want, the basic selling ingredient is its labor-saving benefit. More and more, he feels, the seasonal aspect of the two programs—fan and appliance—can be reconciled.

He found the market still depends to a great extent on impulse buying rather than any long-felt desire on the part of the consumer. A long, drawn-out heat wave will bear that out, he said. But in the interval between those warm spells, when the "impulse" is off and the "freeze" is on, why sit back and wait for weather that may never come again. Why not fill the void by plugging the year-round ventilation theme. Surely, the off-season applications, especially the hassock and the window fan, are very generous. And there is no stretch of the imagination to find them.

• **Off-Season Uses**—In the home, for instance, the salesmen at U. S. Electrical Supply found that the all-year applications for the fan are everywhere.

• A window fan in the kitchen, winter or summer, is a blessing to the housewife who spends most of her working hours cooking and baking. Without a fan, grease and grime collect faster and stay longer during the cooler months when all windows in the home are closed.

• In the living room—the most lived-in room of the house—a small hassock fan could serve as a room freshener after company leaves its tell-tale traces of tobacco and cigar smoke. It could be turned on at noiseless low speed while the bridge game is in progress; the players won't even know it's on until they realize they can breath once again.

• A fan helps in the uniform distribution of heat in winter. It can be used to circulate stratified air, the condition which is brought about by rising levels of heat leaving gradations of temperature in the room.

• The homeowner can place a fan, at low speed, in a "hot spot" in the room. It can circulate the air and serve as a component to the heating system.

• Mustiness in the attic can be eliminated speedily with the use of proper fan equipment.

• The bedrooms become stuffy after the windows are closed tightly during the day. The playroom is usually located in the basement, adjacent to the boiler or furnace. The laundry room is stuffy and damp. The air in the drying room is foul and moisture-laden. The baby's room could stand a change of air, so could the closets. In each case, the right fan can serve the homeowner's needs. It's up to the distributor's salesman to show his prospect these (and more) different applications. Most important of all, he should

BIGGEST single factor in U.S. Electrical Supply's fan merchandising program is the dealer. Salesman, shown here loaded down with catalog, displays, banners and other promotional-aids, starts out in his territory to cement that important link.

demonstrate how each type of fan can serve each application best.

• **Sales Starters**—To insure the success of his fan merchandising program, Jack Tucker conducts a number of sales-training sessions and intra-company campaigns. Once each year, around the beginning of February, the firm's ten outside salesmen meet with a number of manufacturers' representatives of different fan companies for a general sales meeting. Here, each representative conducts a sort of "post mortem" on the newest models, acquainting the salesmen with the mechanics and air-moving abilities of various types. Each representative outlines his company's plans for the future, its campaigns, promotions and advertising, and discusses selling points of his product, and the facts to play up at point of sale.

This meeting is supplemented by regular weekly sessions designed to thrash out any kinks or snags the salesman may find in the field. At these meetings, Jack Tucker, drawing from his 36 years' experience in distribution, serves as moderator and trouble shooter.

• **Personal Contact**—Next, the salesmen are told to take home some of the different types of fans for their own use so that possibly some of the manufacturer's enthusiasm can brush off onto each one of them. It gives them a chance, too, to find out first-hand just how well the product stacks up against the manufacturer's claims. This is a practice which has gained considerable popularity. It is based on the principle that "*you* have to be sold before you'll ever sell anybody else."

Besides taking a fan home for personal use, each salesman carries one with him on all calls to dealers for demonstration purposes. This backs up the salesman's audio approach with a visual—and convincing—selling aid. The company paves the way for these demonstrations by mailing a fully detailed fan catalog to each account long before the season starts. Later, it follows this up with display material and circulars around April.

To further stimulate active participation on the part of his sales force, Jack Tucker holds a fan selling contest every year. Each salesman's name is listed on a large "scoreboard" in plain view of all employees. Beside each name is the amount of sales each has piled up since the start of the contest. The board stays up until the contest is ended, as a reminder to the salesmen "to stay in the running" or lose out on prizes. Often, there is personal pride at stake, and the rivalry within the house reaches the pace of outside competition.

• **Unlimited Season**—Competition within or without is the best cure for any sluggish sales campaign. That's what makes Jack Tucker's program so successful—that and his realistic approach to selling. If you asked him which season of the year he liked best for the fan market, of course he'd say the summertime. Without the heat he'd only be scratching the surface. But if you asked him for which season are certain types of fans best suited, he'd say they were suited for all. The season factor is only relative; it shouldn't be the cut-and-dried absolute for all fan sales.

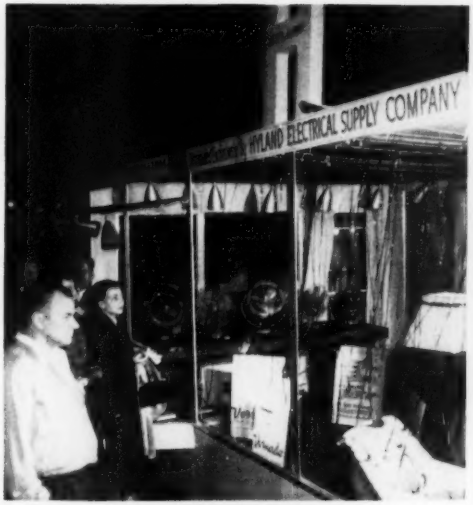
The summer season still is a favorite subject with the fan salesman. That's when he hopes all records for heat spells will be broken—every summer. But just talking about the weather isn't going to bring in the profits. If the weatherman gets his signals crossed and forgets to send a hot spell, there shouldn't be any lull in the campaign.

Those "real hot spells" were spaced pretty far apart in a great many sections of the country. New York was no different. Jack Tucker said that his company could have sold hundreds more fans if only the weather had treated him fairly then. But it didn't. "It was partly through our stressing of fans for off-season duty that we were able to pull our orders up to a level of respectability," he said.

That "level of respectability" won for Jack Tucker an award from the W. W. Welch Co. for his company's outstanding sales record in that fan manufacturer's line. Through cooperative merchandising and advertising with over 1,500 dealers in and around the New York area, the company became the country's leading distributor of the Welch line in 1949-50.

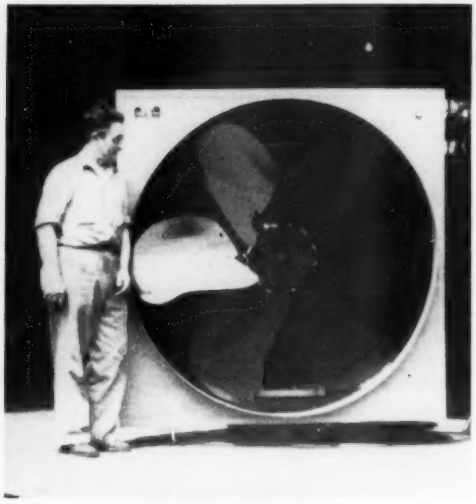
U. S. Electrical Supply's whole program, Jack Tucker pointed out, was in tune with the combined efforts of all parties—the fan manufacturer, the distributor, and the dealer. All had to work together for success. The manufacturer's role became partly passive when he got his goods into the distributor's hands and supplied him with tie-in promotion and advertising, displays and descriptive literature. But the distributor salesman's role didn't change when he sold the dealer. Armed with these manufacturer aids, the salesman had to follow through and show the dealer how to sell to the ultimate customer. It was up to him to educate the dealer to educate the consumer. If he failed in that one important step, then he failed in the whole project. He may as well have gone back to talking aimlessly about the weather and its factors.

But they didn't fail at U. S. Electrical Supply.



PROMOTING

Display which dramatizes the air moving ability of portable fans was sponsored by Hyland Electrical Supply Co., Chicago, Ill., at an electrical show in that city.



WAREHOUSING

Large industrial fan is readied outside the warehouse of National Electric Co., electrical wholesaling firm of Passaic, N. J., for delivery to a nearby manufacturer.

1952 Fan and Ventilating

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
AIRMASTER CORP.					4317 Ravenswood Ave. Chicago 13, Ill.
2411	AC-PS	24″	3	1	$105.40
25118	AC-PS	24″	3	2	126.10
35118	AC-PS	30″	3	2	133.95
55118	AC-PO	24″	3	2	163.50
2611	AC-*	24″	3	1	96.90
27118	AC-*	24″	3	2	116.25
37118	AC-*	30″	3	2	126.10
56118	AC-*	24″	3	2	157.60
2211	AC-BS	24″	3	1	94.80
23118	AC-BS	24″	3	2	116.25
33118	AC-BS	30″	3	2	124.10
57118	AC-BO	24″	3	2	155.65
29118	AC-C	24″	3	2	107.50
24″ to 48″	AV		4	1	108.00 to 194.00
811—10″ Built-in-wall cab. vent.	K	10″	4	1	55.00
12″ to 30″ direct-dr. Exhaust Fans	EX		4	1 & 2	237.83
24″ to 48″ belt-drive Exhaust fans 1 phase	EX		4	1	154.00 to 224.00
24″ to 48″ belt-drive Exhaust fans 3 phase	EX		4	1	168.00 to 320.00
12″ to 48″ gravity shutters					12.10 to 72.00
20″ 3-speed window fan	WV	20″	3	3	69.95
*Counter.					

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
AMERICAN COOLAIR CORP.					P. O. Box 2300 Jacksonville 3, Fla.
W20	WV	20″	3	2	$ 74.95
W24	WV	24″	6	2	99.95
W28	WV	28″	6	2	109.95
V2616	AV*	26″	8	1 or 2	174.00
V3225	AV*	32″	8	1 or 2	208.00
V3825	AV*	38″	8	1 or 2	242.00
V4433	AV*	44″	8	1 or 2	285.00
VT2625(Twin)	AV*	26″	8	1 or 2	283.00
VT3233(Twin)	AV*	32″	8	1 or 2	314.00
VT3250(Twin)	AV*	32″	8	1 or 2	352.00
VT3850(Twin)	AV*	38″	8	1 or 2	415.00
H2616	AV**	26″	8	1 or 2	123.00
H3225	AV**	32″	8	1 or 2	151.00
H3825	AV**	38″	8	1 or 2	177.00
H4433	AV**	44″	8	1 or 2	211.00
H5050	AV**	50″	8	1 or 2	295.00
H5650	AV**	56″	8	1 or 2	326.00
H6250	AV**	62″	8	1 or 2	369.00
*Package unit.					
**Fan only.					
AIR CONTROLS, INC.					2310 Superior Ave. Cleveland, Ohio
W-120	V-WV	14″	4	2	$ 43.50
WC-120	WV	14″	4	2	47.50
W-140	V-WV	16″	4	2	48.95

SELLING

Ventilating fans mounted for vertical discharge in a Panama City, Fla., church were sold by the McGowan Electric Supply Co., Tallahassee electrical distributor.

KEY DESIGNATIONS for Type of Equipment

AC, H.....Air Circulator and Heater
AV .....Attic, Ventilating
BS .....Bracket, Straight
BO .....Bracket, Oscillating
C .....Ceiling
DS .....Desk, Straight
DO .....Desk, Oscillating
EX .....Exhaust
FC, H .....Floor Circulator and Heater
H .....Humidifier
K .....Kitchen, Ventilating
PS .....Pedestal, Straight
PO .....Pedestal, Oscillating
V .....Ventilating, General Purpose
WV .....Window, Ventilating
WVH.....Window, Vent with Humidifier
WaV .....Wall, Ventilating
O .....Others

Equipment Specifications

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
WC-140	WV	16"	4	2	51.95
W-230	V-WV	20"	4	2	53.90
W-400	EX-WV-V	24"	6	2	74.50
W-385	EX-WV-V	24"	6	2	73.00
W-500	EX-WV-V	28"	6	2	79.50
W-600	EX-WV-V	28"	6	2	79.50
SK-710	AV-EX-V	32"	4	1	109.50
SK-825	AV-EX-V	32"	4	1	114.95
SK-950	AV-EX-V	38"	4	1	129.00
SK-1017	AV-EX-V	38"	4	1	131.50
SK-1200	AV-EX-V	38"	4	1	151.50
SK-1400	AV-EX-V	44"	4	1	163.50
SK-1600	AV-EX-V	44"	4	1	176.50
SK-1700	AV-EX-V	50"	4	1	180.00
SK-1800	AV-EX-V	50"	4	1	191.25
SK-2100	AV-EX-V	50"	4	1	219.50
AV-719	AV	32"	4	1	100.85
AV-1017	AV	38"	4	1	227.50
AV-1400	AV	44"	4	1	268.95
AV-1490	AV	50"	4	1	320.95
VS-507	AV	28"	6	1	138.50
VS-835	AV	32"	6	1	160.95

AMERICAN MACHINE & METALS, INC. East Moline, Ill.
(DeBothezat Fans Division)

	AV**	30"	4	1	$129.00
	AV**	36"	4	1	164.00
	AV**	42"	4	1	216.00
	AV**	48"	4	1	249.00
Direct Drive	EX-V	24"	4	2	*131.00
V-Belt Pane	EX-V	30"	4	1	118.00
V-Belt Panel	EX-V	36"	4	1	151.00
V-Belt Panel	EX-V	42"	4	1	195.00
V-Belt Panel	EX-V	48"	4	1	215.00

*Does not include Federal Excise Tax.
**Includes sound deadening box assembled to fan.

BAR-BROOK MFG. CO., INC. 6133 Linwood Ave. Shreveport, La.

HV-36		36"	6	1	$176.50
HV-42		42"	6	1	137.50
BV-48		48"	6	1	229.00
AVP-36		33"	6	1	145.20
FW-30		30"	6	1	87.45
FW-36		36"	6	1	109.95
BV-54		54"	6	1	264.00
W-243		24"	4	2	65.95
W-30		30"	6	2	109.95
FP-30		30"	6	1	109.95
FP-36		33"	6	1	134.20
FP-42		42"	6	1	170.50
AVP-36	AV	33"	6	1	149.00
FH-30	AV	30"	6	1	‡87.00
FH-33	AV	33"	6	1	107.00
FH-36	AV	36"	6	1	123.50
FH-42	AV	42"	6	1	129.00
FH-48	AV	48"	6	1	229.00

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
FH-54	AV	54"	6	1	276.00
W-282	WV	28"	4	2	58.50
RW-282	WV	28"	4	2	71.00
W-302	WV	30"	6	2	119.00
RW-302	WV	30"	6	2	123.00
FW-301	WV	30"	6	1	102.50

BERNS MANUFACTURING CORP.

3050 N. Rockwell St.
Chicago 18, Ill

AV10R	WV	10"	4	1	$ 28.50
AV12R	WV	12"	4	1	33.50
AV12R-2	WV	12"	4	2	37.75
AV16R	WV	16"	4	2	52.50
AV20RE	WV	20"	4	2	59.95
AF20	WV	20"	3	2	49.95
FC12A	FC	12"	4	3	41.95
HF12	FC	12"	4	3	28.50
FH6	H	6"	4	1	18.75
FH8	H	8"	4	1	18.75
CF10N	C	10"	4	3	34.95
CF10NC	C	10"	4	3	37.95
KF8	K	8"	4	1	27.55
KF8C	K	8"	4	1	31.15
KF8S	K	8"	4	1	27.55
KF10N	K	10"	4	1	34.60
KF10NC	K	10"	4	1	38.00
KF10NA	K	10"	4	1	55.40
KF10NCA	K	10"	4	1	57.70
WV24	WV	24"	4	1	92.55
WV30	WV	30"	4	1	104.00
HA324	AV	24"	4	1	110.00
HA330	AV	30"	4	1	115.75
HA336A	AV	36"	4	1	130.65
HA336	AV	36"	4	1	143.30
HA342A	AV	42"	4	1	160.95
B324	AV	24"	4	1	95.90
B330	AV	30"	4	1	102.00
B336A	AV	36"	4	1	114.15
B336	AV	36"	4	1	127.35
B342A	AV	42"	4	1	145.55
B342	AV	42"	4	1	161.70
B348A	AV	48"	4	1	179.00

BROAN MFG. CO., INC.

1668 N. Water St
Milwaukee, Wisc

11	K	10"	5	1	$ 48.53
88S	EX	12"	3	1	81.15
8W	K	10"	5	1	33.60
98S	K	9"	5	1	29.50
70	WV	9"	5	1	26.30
400	C-K	10"	5	1	35.50
451	C-K	10"	5	1	28.50

BUFFALO FORGE CO.

P. O. Box 985
Buffalo, N. Y.

Breez-Air 3635*	AV	24"	3	1
Breez-Air 3635*	AV	30"	3	1
Breez-Air 3635*	AV	36"	3	1
Breez-Air 3635*	AV	42"	4	1
Breez-Air 3635*	AV	48"	4	1
Breez-Air 3635*	AV	54"	4	1
Buffalo 3628	K-WaV	8"	4	1
Design A				
NV-Breeze Panel**	EX	8"-24"	4	1 or 2
Heavy Duty Design				
60, 65 & 50 NV	EX	24"-54"	4	1
"L" Breeze 3222F†	EX	12"-36"	3-4	1
Belt-Air 3222F				
(V-Belt)	EX	24"‡	3	1
Belt-Air 3222F				
(V-Belt)	EX	30"‡	3	1
Belt-Air 3222F				
(V-Belt)	EX	36"‡	3	1
Belt-Air 3222F				
(V-Belt)	EX	48"	4	1
Belt-Air 3222F				
(V-Belt)	EX	42"	4	1
Heavy Duty				
Man Coolers	AC-PS	24"-30"-36" 1½ to 5 H. P.	4	1
"Baby Vent" 3222F				
Sets Size A	V-EX	85 CFM§		1
Sets Size B	V-EX	217 CFM§		1
Sets Size C	V-EX	430 CFM§		1
Sets Size D	V-EX	682 CFM§		1
Sets Size E	V-EX	895 CFM§		1
Sets Size F	V-EX	1130 CFM§		1
Sets Size G	V-EX	1765 CFM§		1
Model "C"				
Unit Heaters	Space Heating	8" to 24"	3-4	1 or 2
3137 "C"***				

§CFM@½" s.p.
***Available for 16,000 to 497,000 Btu/Hr ratings.
*Available with horizontal or vertical shaft units.
**Available in ac, constant or two-speed or dc constant or variable speed.
†Motor removed from closed system.
‡Available in 2-speed.

C & H. AIR CONDIT. FAN CO., INC.

1501-1623 DeKalb Ave., N.E.
Atlanta 8, Ga.

30W28	WV	28"	6	4	$129.00
616AW	WV	16"	3	1	44.95
30AE4-V	AV-EX-V	30"	4	variable	132.00
36AE4-V	AV-EX-V	36"	4	variable	148.30
42AE4-V	AV-EX-V	42"	4	variable	165.20
24AE4	AV-EX-V	24"	4	variable	104.70
30AE4	AV-EX-V	30"	4	variable	120.40
36AE4	AV-EX-V	36"	4	variable	136.20
42AE4	AV-EX-V	42"	4	variable	153.10
42AE4-2	AV-EX-V	42"	4	variable	215.45
48AE4	AV-EX-V	48"	4	variable	236.85
48AE4-3PH	AV-EX-V	48"	4	variable	236.85
48AE4-75	AV-EX-V	48"	4	variable	272.95
54AE4	AV-EX-V	54"	4	variable	312.30
10AS	DS	10"	4	1	21.75
616AS	BS	16"	3	1	45.41
621AEG	C	22"	2	1	74.45
621AS	BS-C	22"	2	1	76.85
20AW	WV	20"	4	2	59.95
24W2	WV	24"	4	2	95.50

Prices include excise tax.

CALIFORNIA DESIGN MFG. CORP.

228 N. Front St.
Burbank, Calif.

12B-A	AC, H	6"	4	1	$ 29.75

PHILIP CAREY MFG. CO.
(Miami Cabinet Div.)

Middletown, Ohio

MC-30-4	AV	30"	4	1	$114.60*
MC-30-VH	AV	30"	4	1	161.30*
MC-36-4	AV	36"	4	1	127.10*
MC-36-VH	AV	36"	4	1	195.50*
MC-42-V	AV	42"	4	1	206.90*
MC-8	K	8"		1	64.70*
MC-18	K	8"	4	1	32.16*
MC-110-G	K	10"	4	1	48.14*
MC-110-GC	K	10"	4	1	46.87*
MC-6	K	6"		3	72.70

*List price includes Federal Excise Tax.

CHELSEA FAN & BLOWER CO., INC.

639 South Ave.
Plainfield, N. J.

EDB	V-AV	24"-60"	4	1 & 2
IND	V-EX	24"-72"	5 or 6	1 & 2
PLBD	V-EX	24"-48"	4	1 & 2
EVB	AV	24"-48"	4	1 & 2
EHB	AV	24"-60"	4	1 & 2
WPR	WV	16"-30"	4	2
AP	WV	18"-30"	4	1 & 2

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
WPJ	WV	12"	4	2	
PH	EX (roof)	24"-60"	5 or 6	1	
PHD	EX (roof)	12"-36"	4	1 & 2	
PLF	V-EX	16"-48"	2-4	1 & 2	
AA	V	20"-24"	4	1 & 2	
BB	V-EX	10"-36"	4	1	
PLDX	EX	16"-36"	4	1	
PLDU & PLDUP	EX	18"-42"	2-4	1	
OPJ	Blower-Exhauster	1350 CFM		1	
OPS	Blower-Exhauster	3500 CFM		1	
MC	PS	24"-30"	4	1	
P	PS	24"	4	2	
CO	Counter	24"	4	2	
C	C	24"	4	2	
PLHA	O*	30"-42"	4	1	

*Intake Hay drying fan.

CHICAGO ELECTRIC MFG. CO.

6333 W. 65th St.
Chicago 38, Ill.

#3328	DS	8"	4	1	$ 8.95
#3368	DO	10"	4	1	14.55
#3362	DO	12"	4	1	21.55
#3310N	DO	10"	4	1	17.95
#3312N	DO	12"	4	2	26.75
#3330NW	WV	10"	4	1	33.75
#3332N	WV	12"	4	1	43.75
#3370	WV	20"	4	3	54.95
#3316N	FC	16"	4	Variable	32.49

CHROM-EVER COMPANY

(Div. of Asquith Associates, Inc.)

1150 Broadway
New York 1, N. Y.

S710	DS	10"	4	1	$ 9.95
D503	DO	10"	4	1	15.95
V710	WV*	10"	4	1	19.95
CV810	WV**	10"	4	1	22.95

*Reversible.
**Casement Reversible.

CIRCULATORS & DEVICES MFG. CORP.

128-168 Thirty Second St.
Brooklyn 32, N. Y.

242P	PS	24"	4	2	$130.00
302P	PS	30"	3	2	137.50
203P	PS	20"	4	3	58.75
30W (Reversible)	WV	30"	4	1	150.00
24W (Reversible)	WV	24"	4	1	140.00
20K (Reversible)	WV	20"	3	3	75.00
QZ12	EX	12"	4	1	36.50
QZ16	EX	16"	4	1	55.00
QZ162	EX	16"	4	2	75.00
QZ18	EX	18"	4	1	60.00
QZ182	EX	18"	4	2	80.00
QZ20	EX	20"	4	1	65.00
QZ202	EX	20"	4	2	97.00
QZ24S	EX	24"	4	1	87.50
QZ242	EX	24"	4	2	105.00
QZ343	EX	30"	4	2	187.00
10K	K-V	10"	4	1	30.00
LD30 (Ranch type)	AV	30"	4	1	110.00
LD36 (Ranch type)	AV	36"	4	1	125.00
240A	AV	24"	4	1 or 2	87.50
300A	AV	30"	4	1 or 2	95.00
360A	AV	36"	4	1 or 2	110.00
420A	AV	42"	4	1 or 2	135.00
480A	AV	48"	4	1 or 2	205.00
HP24	*	24"	4	1	97.50
HP30	*	30"	4	1	105.00
HP36	*	36"	4	1	120.00
HP42	*	42"	4	1	190.00
HP48	*	48"	4	1	290.00
HP54	*	54"	4	1	300.00
HP60	*	60"	4	1	375.00
CC12	FC	12"	4	3	49.95

*Industrial Belt Drive.
(All fans available in ball bearing.)

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
DAYTON ELECTRIC MFG. CO.					748 W. Adams St. Chicago 6, Ill.
3F186	DS	10"	4	1	$ 24.50
3F160	DS	12"	3	1	22.00
3F161	DS	14"	3	1	31.00
3F141	DS	14"	4	1	48.00
3F150	DS	18"	3	2	66.00
3F188	DS	20"	3	2	54.00
3F189	PS	20"	3	2	78.00
3F132	DS	24"	3	2	97.00
3F133	PS	24"	3	2	124.00
3F137	PS	30"	3	2	144.00
3F155	DO	24"	3	2	110.00
3F158	PO	24"	3	2	137.00
4F101	EX	12"	3	1	32.00
4F232	EX	16"	4	1—high	46.00
4F104	EX	16"	4	1—low	49.00
4F105	EX	18"	4	1—high	50.00
4F106	EX	18"	4	1—low	52.00
4F107	EX	20"	4	1—high	
4F108	EX	20"	4	1—low	51.00
4F110	EX	24"	4	1—low	58.00
1C912*	WV	12"	3	1	40.00
4F219	WV	10"	3	1	21.00
4F224	WV	16"	3	1	34.00
4F229*	WV	20"	3	1	53.00
4F231*	WV	20"	3	2	70.00
5F76	WV	20"	3	1	61.00
5F80	WV	22"	3	1	64.00
5F84	WV	24"	4	1	71.00
5F88	WV	30"	4	1	84.00
1C457	K	10"	3	1	33.00
5F51	AV	24"	3	1	77.00
5F52	AV	30"	3	1	87.00
5F53	AV	36"	3	1	102.00
5F54	AV	42"	3	1	129.00
5F55	AV	48"	3	1	177.00

*Reversible blade fan.

DIEHL MANUFACTURING CO.

1137 Finderne Ave.
Somerville, N. J.

12912	DO	12"	4	3	$ 44.20
16812	DO	16"	4	3	52.00
10AJ17	DO	10"	4	1	17.55
12AJ16	DO	12"	4	2	24.00
16AJ16	DO	16"	4	2	44.35
9EQD16	V	9"	4	1	35.00
12EQD16	V	12"	4	1	38.00
16EQD16	V	16"	4	1	43.00
2101	K	9"	4	1	16.55
3169	K	10"	4	1	18.10
2151	K-WV	9"	4	1	20.50
3160	K-WV	10"	4	1	27.95
5168	K-WaV	10"	4	1	30.20
A24EA16*	AV	24"	3	1	100.00
B30EA16*	AV	30"	3	1	110.00
A36EA16*	AV	36"	3	1	140.00
A42EA16*	AV	42"	3	1	150.00
C48EA16*	AV	48"	3	1	194.00

*Available with Vertical Shaft.

24LF16	PS	24"	3	2	126.10
30LF16	PS	30"	3	2	133.95
24LC16	PS (short)	24"	3	2	116.25
30LC16	PS (short)	30"	3	2	126.10
24LW16	BS	24"	3	2	116.25
30LW16	BS	30"	3	2	124.10
24LS16	C	24"	3	2	100.45
87BN	PO	24"	3	2	163.50
87LN	PO	24"	3	2	157.60
87WN	BO	24"	3	2	155.85
18FPD16*	Ex-Direct Drive	18"	4	2	104.00
24FPD16*	Ex-Direct Drive	24"	4	2	130.00
30FPD16*	Ex-Direct Drive	30"	5	2	215.00
36FPF16*	Ex-Direct Drive	36"	5	2	320.00
12AJP16	PO	12"	4	2	42.35
PF16812	PO	16"	4	2	76.85
20WP16-1	WV	20"	3	3	69.95
12F16	FC	12"	4	3	54.75

*115 Volts, Single Phase. Also available for 230 Volts, Single Phase and 220 or 440 Volts, Three Phase.

DOMINION ELECTRIC CORP.

120 Elm St. Mansfield, Ohio

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
2004		8"	4	1	$ 5.95* 6.45**
2005		12"	4	1	12.85* 13.85**
2012		10"	4	1	15.85* 16.95**
2015		12"	4	1	19.95* 20.95**
2020		12"	4	2	22.95* 23.95**
2014		10"	4	1	22.95* 24.95**
2023		12"	4	1	26.95* 29.45**
2019		12"	4	1	21.95* 23.95**

*Zone 1 prices east of Denver.
**Zone 2 prices Denver and west.

ELECTRO SPECIALTY MFG. CO.

1900 Third St., N. E. Minneapolis 18, Minn.

"A" (Ceiling)	K	8"	10	1	$51.50
				3	58.75
"C"	K	9"	10	3	87.75
"A" (Wall)	K	8"	10	1	39.75

THE EMERSON ELECTRIC MFG. CO.

8100 Florissant Ave St. Louis 21, Mo.

6250 (Bronze)	DO	10"	4	1	$ 25.95
6250 (Ivory)	DO	10"	4	1	26.95
77646 (Bronze)	DO	12"	4	3	44.95
77646 (Ivory)	DO	12"	4	3	46.95
77648 (Bronze)	DO	16"	4	3	52.95
77648 (Ivory)	DO	16"	4	3	54.95
2450	DO	10"	4	1	22.95
76646	DO	12"	4	3	38.95
76648	DO	16"	4	3	44.95
77046	DO	12"	4	3	56.00
77048	DO	16"	4	3	65.00
2850	DO	10"	4	1	16.95
3860	DO	12"	4	2	26.95
6250PED (Bronze)	PO	10"	4	1	30.95
77646PED (Bronze)	PO	12"	4	3	62.95
77648PED (Bronze)	PO	16"	4	3	73.95
74646	O	12"	4	3	47.95
H60-TB	PS	24"	3	2	131.00
H60-TC	PS	30"	3	2	136.00
H60-TC-4	PS	30"	3	2	151.00
84641	C	36"	4	2	67.00
86641	C	36"	4	2	75.00
85641	C	52"	4	3	85.00
87641	C	52"	4	3	94.00
92646	V	12"	4	1	34.00
92648	V	16"	4	1	45.95
3550-P	V	18"	4	1	19.95
3560-P	V	12"	4	1	26.95
3550-WB	K	18"	4	1	30.95
3550-CB	K	18"	4	1	30.95
74648	WV	16"	4	2	49.50
746310	WV	20"	3	2	68.50
756412	WV	24"	4	2	89.50

FASCO INDUSTRIES, INC.

255 N. Union St. Rochester 2, N. Y.

55	FC	12"	4	3	$ 44.95
844 & 846	K	8"	4	1	27.95
1044 & 1046	K	10"	4	1	33.95
1021	K	10"	6	3	48.95
163	DO-BO	16"	4	3	43.95
127	DO-BO	12"	4	3	32.95
124	DO-BO	12"	4	2	26.95
101	DO-BO	10"	4	1	21.95
103	DO-BO	10"	4	1	15.95
165	PO	16"	4	3	59.95
40	FC	10"	4	2	32.95
45	FC	10"	4	1	29.95
1637	EX	16"	4	1	31.95
2037	EX	20"	3	2	59.95
1237	EX	12"	4	1	26.95
1037	EX	10"	4	1	15.95
1026	K	10"	6	3	41.95
861-2	WV	8"	4	1	31.95
863	WV	8"	4	1	34.95

GENERAL ELECTRIC CO.

(Small Appliance Div.)

1285 Boston Ave. Bridgeport 4, Conn.

S106	DO-BO	10"	4	1	$16.95
V123	DO-BO	12"	4	3	45.95
V163	DO-BO	16"	4	3	50.95
C102	K	10"	3	1	49.95
A1	DS-FC-V-WV-O	10"	4	2	34.95
T1	WV-V-AC	12"	8 (12 fans)	3	74.95
F1	FC	12"	8 (2 sets on 1 shaft)	3	64.95

THE A. C. GILBERT CO.

265 Peck St. New Haven, Conn.

A410	DS	8"	4	1	$ 6.95
A420	DO	8"	4	1	9.95
A430	DO	10"	4	1	13.95
A440	DO	12"	4	1	18.95
A2000	BS	Air foil	3	3	34.95
A4000	FC	Air foil	3	3	49.50
A114	WV	10"	4	1	17.50
A2500	WV	Air foil	3	3	44.95

Prices 5% higher Denver and West.

HOLCOMB & HOKE MFG. CO., INC.

1545 Van Buren St. Indianapolis, Ind.

U2433 CP	AV	24"	4	1	$142.65
U3033 CP	AV	30"	4	1	183.90
U3633 CP	AV	36"	4	1	204.10
U4233 CP	AV	42"	4	1	231.95
U4250 CP	AV	42"	4	1	282.95
U2433 C	AV	24"	4	1	115.50
U3033 C	AV	30"	4	1	114.50
U3633 C	AV	36"	4	1	156.25
U4233 C	AV	42"	4	1	175.50
U4250 C	AV	42"	4	1	226.50
U4850 K	AV	48"	4	1	256.50
U4875K	AV	48"	4	1	288.75
S2416 K	AV	4"	4	1	105.50
S3033 K	AV	30"	4	1	135.25
S3633 K	AV	36"	4	1	146.50
S4233 K	AV	42"	4	1	165.00
S4250 K	AV	42"	4	1	206.75
S4850 K	AV	48"	4	1	236.00
S4875 K	AV	48"	4	1	266.00
24 WF	AV	24"	4	2	95.00
24 WFHF	FC	24"	4	2	110.00

List Prices Plus Tax.
"CP" indicates a complete package for horizontal installation.
"U" indicates horizontal or vertical installation with ball bearing motor.
"S" indicates vertical installations only with a sleeve bearing motor.

HUNTER FAN AND VENTILATING CO.

400 S. Front St. Memphis, Tenn.

4700BV-S	AV	24"	4	1	$154.93
6800BV-S	AV	30"	4	1	175.53
95GV	AV	34"	4	1	230.48
50-AXB	AV-EX	24"	4	1	148.48
75-BXB	AV-EX	30"	4	1	172.20
10-DXB	AV-EX	36"	4	1	209.48
14-FXB	AV-EX	42"	4	1	256.20
18-HXB	AV-EX	48"	4	1	283.48
18-HXB-3	AV-EX	48"	4	1	314.48

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
B2500	WV	18"	4	2	59.95
B3400	WV	22"	4	2	79.95
W30SI	WV	30"	4	1	115.45
2451P	AC	24"	4	2	129.00
2451C	AC	24"	4	2	104.00
2451B	AC	24"	4	2	114.00
3051P	AC	30"	4	2	136.00
3051C	AC	30"	4	2	111.00
3051B	AC	30"	4	2	120.00
121	C	52"	4	3	94.00
363	C	36"	4	2	87.00
40084-A	FC	12"	4	3	49.95
265	DO	16"	4	3	52.95
37004-A	DO	12"	4	2	24.95
E1251	EX	12"	4	2	49.95
E1650	EX	16"	4	2	59.95
E1850	EX	18"	4	2	69.95

ILG ELECTRIC VENTILATING CO.

2850 N. Crawford Ave.
Chicago 41, Ill.

48078	EX-V	6"	3	1	$31.50
48080	EX-V	8"	3	1	35.70
48090	EX-V	10"	3	1	46.20
48095	EX-V	12"	3	1	72.45
48106	EX-V	16"	3	1	121.80
48108	EX-V	18"	3	1	172.20
48110	EX-V	21"	3	1	211.05
48112	EX-V	24"	3	1	280.35
48114	EX-V	30"	3	1	421.05
48116	AV-EX-V	36"	3	1	577.50
48119	AV-EX-V	42"	3	1	743.40
48121	EX-V	48"	3	1	919.80
2127	EX-V	60"	7	1	1814.70
2130	EX-V	72"	7	1	2223.90
920	WV	10"	3	Var.	93.95
9100	PS	12"	4	1	109.00
6130	AV	20"	3	2	177.95
6100	AV-PS	24"	3	2	193.42
6103	AV-PS	30"	3	2	238.85
7082	BS	24"	3	2	225.48
8132	C-K	10"	3	1	53.05
8091	K-Wav	10"	3	1	68.42
8102	WV	10"	3	1	53.05
8040	WV	8"	3	1	29.84
8151	K-WaV	10"	3	1	45.00

10%; Federal Excise Tax included where it applies.

INTERNATIONAL OIL BURNER CO.

3800 Park Avenue
St. Louis 10, Missouri

C-20K	WV	20"	3	2	$54.95
224K	WV	24"	3	2	89.95
CR-20	WV	20"	3	2	49.95
CA2	WV	2-12"	2-4	2	64.95
DL2	WV	2-12"	2-4	2	74.95
112J	WV	12"	4	1	34.95
116J	WV	16"	3	1	44.95

KISCO COMPANY, INC.

2408-40 DeKalb St.
St. Louis 4, Mo.

Regal-Aire	FC	12"	4	3	$44.95
KW-12 Window Fan	WV	12"	3	1	27.95
KW-16 Window Fan	WV	16"	4	1 or 3	39.95
KW-20 Window Fan	WV	20"	3	2	54.95
Whirlaway	FC	12"	3	3	36.95
Lo-Air	FC	12"	4	3	40.95
Utility	FC	12"	4	3	45.95
Table-Air	FC	12"	4	3	59.95
Adjusto-Air	FC	12"	3	3	38.95
Serves-Table	FC	12"	4	3	72.95
Trav-L-Air	V	8"	5	1	17.95
#40	FC	12"	3	1	24.95
Versatil-Air	FC-V	16"	4	3	49.95
Re-16 Window Fan (Reversible)	WV	16"	4	1 or 3	49.95
KW-20D (Deluxe)	WV	20"	3	2	59.95
KW-20S (Auto. Shutter)	WV	20"	3	2	72.95
CW-13 (Casement W. F.)	WV	2-12"	3	3	62.95
CW-14 (Casement W. F.)	WV	2-12"	3	3	64.95

KNAPP-MONARCH CO.

3500 Bent St.
St. Louis 16, Mo.

3-508	FC*	12"	4	2 (4 pole)	$49.95
7-501	WV	20"	3	2 (6 pole)	50.95
4-505	WV	16"	3	2 (4 pole)	39.95
3-509	DO	12"	4	1 (4 pole)	21.95
2-511	DO	10"	4	1 (4 pole)	16.95
1-503	DS	8"	4	1 (non-osc.)	7.95

*All-purpose fan.

LYDON-BRICHER MFG. CO.

2500 University Ave.
St. Paul 4, Minn.

1750	EX	4½"	4	1	$ 6.25
1742	BS	5"	4	1	6.75
1743	DS	8"	2	1	8.00

THE LAU BLOWER CO.

2001 Home Ave.
Dayton 7, Ohio

1252	WV	12"	3	3	$ 39.95
1652	WV	16"	3	3	49.95
2052	WV	20"	3	3	59.95
2452	WV	24"	4	1	93.50
2452WR2	WV	24"	4	2*	109.50
3052	WV	30"	4	1	114.00
3052WR2	WV	30"	4	2*	134.00
NA243R	AV	24"	4	1	112.56
NA303R	AV	30"	4	1	126.27
NA363R	AV	36"	4	1	140.00
NA423R	AV	42"	4	1	164.86
NA243	AV	24"	4	1	90.03
NA303	AV	30"	4	1	100.20
NA363	AV	36"	4	1	122.33
NA423	AV	42"	4	1	153.30
NA425	AV	42"	4	1	221.26
NA485	AV	48"	4	1	241.96
NA487	AV	48"	4	1	275.44

*Elec. Reversible.

MARATHON ELECTRIC MFG. CORP.

Randolph & Cherry Sts.
Wausau, Wis.

34M56	AC-PS*	22"	3	1	$ 87.95
34M60	AC-PS*	30"	4	2	108.75
34M57	AC-PS*	30"	4	1	87.95
34M50	AC-PS**	22"	3	1	104.65
34M58	AC-PS**	22"	3	2	123.80

*Low
**High

MARTIN FAN AND BLOWER CO., INC.

4634 W. 21 Pl.
Chicago 50, Ill.

UF30-¼	AV	30"	3	1	$ 91.14
UF36-½	AV	36"	3	1	120.98
UF42-½	AV	42"	3	1	166.25
UF36-¼	AV	36"	3	1	98.50
UF42-½	AV	42"	3	1	138.40
W10UF	WV	10"	3	1	24.40
W16UF3	WV	16"	3	3	51.40
UF48-½	AV	48"	3	1	174.90
UF48-¾	AV	48"	3	1	198.55
UF54-½	AV	54"	3	1	252.48
UF54-¾	AV	54"	3	1	276.12
UF60-¾	AV	60"	3	1	382.47

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
16UF	WaV	16"	3	1	30.65
20UF	WaV	20"	3	1	62.12
24UF	WaV	24"	3	1	61.07
1300	O*	8"	3	1	16.03
1301	O*	10"	3	1	17.32
1302	O*	10"	3	1	28.64
1304	O*	12"	3	1	30.44

*Booster Fan for furnace ducts.

MASTER APPLIANCE MFG. CO.

Bridge & Ontario Streets
Racine, Wisconsin

12110					
Breeze Master	AC-DC	16"	3		*$19.95
12-DC-10					
Breeze Master	DC	10"	3		*18.95

*Includes Federal Excise Tax.

MEIER ELEC. & MACH. CO., INC.

3525 E. Washington St.
Indianapolis 7, Ind

8202-F	WV	20"	3	3	$ 69.95
8201-F	WV	20"	3	3	69.95
8162-F	WV	16"	3	3	59.95
8184-F	V	16"	3	3	54.50
8185-F	V	16"	3	3	44.50
8121-F	WV	12"	3	3	54.50

E. N. MIMMS CO.

808 Mason St
Louisville 4, Kentucky

	AC	18"	Birdwing	3	$ 69.80 Low Stand
					88.30 High Stand
24	AC	24"	Birdwing	3	89.80 Low Stand
					118.30 High Stand
F-12 Lowboy	FC	12"	3	3	49.80
G-14 Northington	FC	14"	3	3	79.50
30	AC	30"	Birdwing	2	127.50 Low Stand
					162.00 High Stand
20 A	AC	30"	Birdwing	1	125.50 Low Stand
					160.00 High Stand
16 W	WV	16"	4	3	39.95
20 W	WV	20"	3	3	59.95
16 VS	EX	16"	3	1	53.50
18 VS	EX	18"	3	1	79.80
18 VB	EX	18"	3	1	89.80
20 VS	EX	20"	3	1	87.50
20 VB	EX	20"	3	1	97.50
24 VS	EX	24"	3	1	96.50
24 VB	EX	24"	3	1	114.50
30 VS	EX	30"	3	1	114.50

NATIONAL APPLIANCE CO.

4814-18 W. Vernor Hwy
Detroit 9, Mich

Model No. 50	WaV	10"	9	1	$ 35.95
Model No. 40	WaV	8"	9	1	31.50
Model No. 30-C	C	10"	4	1	37.35
Model No. 80	V	8"	9	1	29.95
Model No. 61	WV	10"	9	1	32.95

HERMAN NELSON DIVISION
(American Air Filter Co., Inc.)

1824 Third Ave.
Moline, Illinois

CA 1011*	EX-V-WaV	10"	2	1	$ 38.00
TCA 1011*	EX-V-WaV	10"	2	2	50.00
CA 1211*	EX-V-WaV	12"	2	1	44.00
TCA 1211*	EX-V-WaV	12"	2	2	61.00
CA 1411*	EX-V-WaV	14"	2	1	56.00
TCA 1411*	EX-V-WaV	14"	2	2	72.00
DA 1411*	EX-V-WaV	14"	2	1	72.00
TDA 1411*	EX-V-WaV	14"	2	2	101.00
DA 1611*	EX-V-WaV	16"	2	1	88.00
TDA 1611*	EX-V-WaV	16"	2	2	116.00
DA 1821*	EX-V-WaV	18"	2	1	119.00
TDA 1821*	EX-V-WaV	18"	2	2	155.00
DA 2021*	EX-V-WaV	20"	2	1	134.00
TDA 2021*	EX-V-WaV	20"	2	2	169.00
DA 2421*	EX-V-WaV	24"	2	1	180.00
TDA 2421*	EX-V-WaV	24"	2	2	204.00
DA 3031*	EX-V-WaV	30"	2	1	273.00
TDA 3031*	EX-V-WaV	30"	2	2	311.00
DA 3631*	EX-V-WaV	36"	2	1	408.00
BA 2421**	EX-V-WaV	24"	2	1	98.00
TBA 2421**	EX-V-WaV	24"	2	2	147.00
BA 3021**	EX-V-WaV	30"	2	1	115.00
TBA 3021**	EX-V-WaV	30"	2	2	190.00
BA 3621**	EX-V-WaV	36"	2	1	137.00
PDA 1411***	EX-V-WaV	14"	2	1	100.00
PDA 1611***	EX-V-WaV	16"	2	1	120.00
PDA 1811***	EX-V-WaV	18"	2	1	150.00
PDA 2011***	EX-V-WaV	20"	2	1	205.00
PDA 2411***	EX-V-WaV	24"	2	1	341.00

*Standard Direct Drive.
**Belt Drive (T Designates two speed).
***High Powered Direct Drive.

THE PEERLESS ELECTRIC CO.

1401 W. Market St.
Warren, Ohio

PV-0	EX	10"	6	1 or 3	$ 32.00*
PVS-1	EX	12"	4	1 or 3	40.50*
PVS-2	EX	16"	4	1 or 3	43.00*
PVS-16	EX	16"	4	1-2-3	82.00*
PVS-18	EX	18"	4	1-2-3	98.00*
PVS-24	EX	24"	4	1-2-3	122.00*
PVS-30	EX	30"	4	1-2-3	178.00*
PVB-24	EX	24"	4	1	126.00*
PVB-30	EX	30"	4	1	154.00*
PVB-36	EX	36"	4	1	207.00*
PVB-42	EX	42"	4	1	242.00*
PVB-48	EX	48"	4	1	301.00*
PAT-24	AV	24"	4	1 or 2	87.10*
PAT-30	AV	30"	4	1 or 2	102.85*
PAT-36	AV	36"	4	1 or 2	118.60*
PAT-42	AV	42"	4	1	157.30*
PAT-48	AV	48"	4	1 or 2	203.30*

*List Price for single speed units.

PERFECT-LINE MFG. CORP.

Old Country Rd.
Hicksville, L. I., N. Y.

X-500	K-EX	8"	5	1	$ 23.00
500	K-EX	8"	5	1	26.00
511	C-EX	8"	5	1	19.00
700	C-EX	5" Rotor		1	54.00
X-800	K-C-EX	10"	4	1	28.00
800	V-C-EX	10"	4	1	38.00
X-811	C-EX	10"	4	1	23.00
C-8	C-WaV	8"	5	1	30.00
C-8-VS	C-WaV	8"	5	3	37.00
C-10	C-WaV	10"	4	1	38.00
C-10-VS	C-WaV	10"	4	3	45.00
910	V-EX-WaV	10"	4	1	24.00
912	V-EX-WaV	12"	4	1	35.00
916	V-EX-WaV	16"	4	1	48.00
916-A	V-EX-WaV	16"	4	1	52.00
918	V-EX-WaV	18"	4	1	54.00
918-A	V-EX-WaV	18"	4	1	58.00
924	V-EX-WaV	24"	4	1	82.00
924-A	V-EX-WaV	24"	4	2	112.00

PRYNE & COMPANY, INC.

P. O. Box 668
Pomona, California

Blo-Fan 206	EX-K	6"	7	1	$27.85
Blo-Fan 208	EX-K	8"	7	1	35.00
Blo-Fan 210	EX-K	10"	7	9	49.75

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
Aerofan 243	EX-K-WaV	8"	8	1	27.80
Aerofan 245	EX-K-WaV	10"	8	1	29.70
Aerofan 225-O	EX-K	10"	8	1	27.15
Aerofan 225-21	EX-K	10"	8	1	30.00
Aerofan 225-22	EX-K	10"	8	1	30.00

REED UNIT-FANS, INC.

1001 St. Charles Ave.
New Orleans 8, La.

RUF-24	AV-WaV-WV*	24"	6	1	$ 98.11
RUF-30	AV-WaV-WV*	30"	6	1	103.54
RUF-36	AV-WaV-WV*	36"	6	1	136.90
RUF-42	AV-WaV-WV*	42"	6	1	151.33
RUF-42X	AV-WaV	42"	6	1	210.82
RUF-48XA	AV-WaV	48"	6	1	261.35
RVU-24	AV	24"	6	1	118.48
RVU-30	AV	30"	6	1	132.42
RVU-36	AV	36"	6	1	156.31
RVU-42	AV	42"	6	1	187.17
RTS-20	WV	20"	6	2	69.50
RTS-24	WV	24"	6	2	95.96
RTS-30	WV	30"	6	2	111.15

*Depending upon accessories.

REYNOLDS ELECTRIC CO.

3000 River Road
River Grove, Ill.

2153EN	PS	12"	2	3
2153CR	PS	12"	2	3
2147EN	PS	16"	2	3
2147CR	PS	16"	2	3
1914EN	PS	20"	2	3
1874CR	PS	20"	2	3
1915EN	PS	24"	3	3
1891CR	PS	24"	3	3
2150EN	DS	12"	2	3
2150CR	DS	12"	2	3
2158EN	DS	16"	2	3
2158CR	DS	16"	2	3
1910EN	DS	20"	2	3
1890CR	DS	20"	2	3
1912EN	DS	24"	3	3
1913CR	DS	24"	3	3
2160EN	BS	12"	2	3
2160CR	BS	12"	2	3
2161EN	BS	16"	2	3
2161CR	BS	16"	2	3
2134EN	BS	20"	2	3
2134CR	BS	20"	2	3
2066EN	BS	24"	3	3
2066CR	BS	24"	3	3
2156EN	C	12"	2	3
2156CR	C	12"	2	3
2162EN	C	16"	2	3
2162CR	C	16"	2	3
1748EN	C	20"	2	3
1748CR	C	20"	2	3
1842EN	C	24"	3	3
1842CR	C	24"	3	3
2152EN	C	12"	2	3

PHIL RICH FAN MFG. CO., INC.

2701 So. Main St.
Houston, Texas

50-10-1S	AC-BS-DS-FC	10"	4	1	$ 19.95
50-12-1S	AC-BS-DS-FC	12"	4	1	29.95
50-12-3S	AC-BS-DS-FC	12"	4	3	32.95
50-14-3S	AC-BS-DS-FC	14"	4	3	37.95
50-16-3S	AC-BS-DS-FC	16"	4	3	42.95
50-18-3S	AC-BS-DS-FC	18"	4	3	49.95
50-20-3S	AC-BS-DS-FC	20"	4	3	54.95
50-20P-3S	PS	20"	4	3	74.95
50-18P-3S	PS	18"	4	3	68.95
50-16P-3S	PS	16"	4	3	57.95
10-14P-3S	PS	14"	4	3	52.50
36" H-V	AV	36"	4	1	144.00
42" H-V	AV	42"	4	1	148.50
30" H-V	AV	30"	4	1	115.50
48" H-V	AV	48"	4	1	217.25
24" H-V	AV	24"	4	1	107.25

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price

ROBBINS & MYERS, INC.

387 S. Front St.
Memphis, Tenn.

B2508	WV	18"	4	2	$ 58.95
B3488	WV	22"	4	2	78.95
B2848	WV	28"	4	2	108.95
R-W30SI	WV	30"	4	1	115.45
R-4700BVS	AV	24"	4	1	154.93
R-6800BVS	AV	30"	4	1	175.53
R7600GV	AV	34"	4	1	209.48
R-95GV	AV	34"	4	1	230.48
R-50-AXB	AV-EX	24"	4	1	146.48
R-75-BXB	AV-EX	30"	4	1	172.20
R-10-DXB	AV-EX	36"	4	1	209.48
R-14-FXB	AV-EX	42"	4	1	256.20
R-18-HXB	AV-EX	48"	4	1	293.48
R-18-HXB-3	AV-EX	48"	4	1	314.48
40004	FC	12"	4	3	49.95
R-56004A	BO-DD	10"	4	1	17.45
R-37004A	BO-DD	12"	4	2	24.95
22004A	BO-DD	16"	4	3	43.95
23004B	BO-DD	12"	4	3	43.95
24004A	BO-DD	16"	4	3	52.95
35004A	PO	16"	4	3	59.95
R-2451C	AC	24"	4	2	104.00
R-2451P	AC	24"	4	2	129.00
R-2451B	AC	24"	4	2	114.00
R-2451W	AC	24"	4	2	114.00
R-3151C	AC	30"	4	2	111.00
R-3051P	AC	30"	4	2	136.00
R-3051B	AC	30"	4	2	120.00
R-3051W	AC	30"	4	2	120.00
363	C	36"	4	2	67.00
360	C	36"	4	1	72.00
361	C	36"	4	1	73.00
362	C	36"	4	1	74.00

ROTO-BEAM CORP. OF AMERICA, INC.

1755 N. Keeler Ave.
Chicago 39, Ill.

112-L-S-T-&-B-3	AC-DS-FC-WaV	11"	5	3	$ 29.95
112-L-S-T-&-B-1	AC-DS-FC-WaV	11"	5	1	23.95
112-L-S-B-3-H-S	AC-PS	11"	5	3	49.00
116-L-S-B-&-T-3	AC-DS-FC-WaV	15"	5	3	39.95
116-L-S-B-&-T-1	AC-DS-FC-WaV	15"	5	1	33.95
116-L-S-B-3-H-S	AC-PS	15"	5	3	59.00
119-L-S-B-&-T-3	AC-DS-FC-WaV	17"	5	3	59.00
119-L-S-B-&-T-1	AC-DS-FC-WaV	17"	5	1	48.25
119-L-S-B-3-H-S	AC-PS	17"	5	3	88.50
119-P-W-3	AC-WV-V-FC	17"	5	3	65.00
119-P-W-1	AC-WV-V-FC	17"	5	1	54.25
130-L-S-3	AC-C-FC-WaV	27"	5	3	219.24
130-L-S-1	AC-C-FC-WaV	27"	5	1	203.50
130-L-S-3-HS	AC-PS	27"	5	3	249.20
112-H-B-3	K-WV-WaV-O	11"	5	3	29.95
112-H-B-1	K-WV-WaV-O	11"	5	1	23.95
116-H-B-3	K-WV-WaV-O	11"	5	3	39.95
116-H-B-1	K-WV-WaV-O	11"	5	1	33.95
119-H-B-3	K-WV-WaV-O	17"	5	3	59.00
119-H-B-1	K-WV-WaV-O	17"	5	1	48.25
112-A-V-3	EX-V-O	11"		3	28.95
112-A-V-1	EX-V-O	11"		1	15.95
116-A-V-3	EX-V-O	15"		3	28.95
116-A-V-1	EX-V-O	15"		1	22.95
119-A-V-3	EX-V-O	17"		3	38.20
119-A-V-1	EX-V-O	17"		1	31.90

SCHWITZER-CUMMINS CO.

1125 Mass. Ave.
Indianapolis 7, Ind.

PSW-10	WV	10"	3	1	$ 19.50
PW-12	WV	12"	3	2	24.95
PW-16	WV	16"	4	2	47.50
RW-12	WV	12"	4	2	43.50
RW-16	WV	16"	4	2	55.50
RW-20	WV	20"	4	2	88.95
RWP 12	FC-WV	12"	4	2	47.50
RWP-16	FC-WV	16"	4	2	59.95
P-12	FC	12"	4	2	37.95
P-16	FC	16"	4	2	49.95
CAB-241	FC-WV	24"	4	1	100.00
PC-242	AV	24"	4	1	98.70

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
PC-302	AV	30"	4	1	145.10
PC-363	AV	36"	4	1	153.90
PC-425	AV	42"	4	1	212.80
PA-302	EX	30"	4	1	126.50
PA-363	EX	36"	4	1	142.55
PA-425	EX	42"	4	1	188.00
PA-485	EX	48"	4	1	218.35
PA-487	EX	48"	4	1	259.40
PA-48-10	EX	48"	4	1	280.00
PE-12	EX	12"	3	2	28.50
PE-16	EX	16"	4	2	42.50
PE-20	EX	20"	4	2	55.70

SAMSON UNITED CORP.

1700 University Ave. Rochester 10, N. Y.

1046N*	DO	10"	4	1	$ 21.95
1244N*	DO	12"	4	2	29.95
1044N*	AC	10"	4	1	24.95
1248N*	AC	12"	4	1	27.95
1249N*	AC	12"	4	2	36.95
1247N*	AC	12"	4	2	37.95
1043N*	WV	10"	4	1	24.95
1245N*	WV	12"	4	2	31.95

*All models have rubber blades.

SECO-LITE MFG. CO.

4916 Easton Ave St. Louis 13, Mo.

W-203	WV	20"	3	2
W-204	WV	20"	4	2
244A	AV-V	24"	4	1
304A	AV-V	30"	4	1
364B	AV-V	36"	4	1
424C	AV-V	42"	4	1
484D	AV-V	48"	4	1
244B	AV-V	24"	4	1
304C	AV-V	30"	4	1
364D	AV-V	36"	4	1
424E	AV-V	42"	4	1
484E	AV-V	48"	4	1

SHEPLER MANUFACTURING CO.

1312 Sheffield St. Pittsburgh 12, Pa

#81	K-C-V-EX	10"	5	1*	$ 35.00**
#9	D-WaV-EX-Automatic	10"	5	1*	60.00***
#10 Chrome	K-WaV-EX	10"	5	1*	37.00**
#10 White	K-WaV-EX	10"	5	1*	35.00**
#4A	K-WaV-EX	10"	5	1*	29.95**
#7	K-Chimney-EX	10"	5	1*	22.50**
#7-L	K-Chimney-EX	10"	5	1*	25.00**
#1	K-C-V-EX	8"	5	1*	29.95**
#2	K-Chimney-EX	8"	5	1*	20.00**
#2-L	K-Chimney-EX	8"	5	1*	22.50**

*All the above fans can be operated with 3-speed control switch. High, Medium, Low—Cat. No. $7.50.
10" models 650 C.F.M.; 8" models 500 C.F.M
**Plus Tax.
***Tax included.

SIGNAL ELECTRIC MFG. CO.

Menominee, Mich

562	DO	10"	4	1	$ 21.95
361	DO	12"	4	3	31.50
1251	DO	16"	4	3	43.50
P-1251	PO	16"	4	3	59.95
TF-122	FC	12"	4	3	46.00
TF-123	FC	12"	4	3	48.00
CF-20A	PS	20"	3	2	94.50
451	DO	10"	4	2	30.95
1049	DO	10"	4	1	17.45
1249	DO	12"	4	2	26.90
1649	DO	16"	4	3	34.85

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
W-101	WV	10"	4	1	19.95
W-201	WV	20"	3	3	61.50
WR-122*	WV	12"	6	1	37.95
WR-162*	WV	16"	6	2	49.95
WR-202*	WV	20"	3	2	72.95
V-50A**	K	10"	4	1	34.40
CW-100	K	7½"	6	3	39.90
V-708***	V	8"	4	3	21.50
V-710***	V	10"	4	3	25.75
V-712***	V	12"	4	3	37.80
V-716***	V	16"	6	3	57.75
V-105**	V	10"	4	3	22.45
V-510	V	10"	4	3	14.25
V-512	V	12"	4	3	19.80
V-516A	V	16"	4	3	28.85
V-520A	V	20"	3	3	57.25
V-312**	EX	12"	6	3	34.24
V-316**	EX	16"	6	3	52.25
V-318**	EX	18"	6	3	57.80
V-124A**	EX	24"	6	2	174.00

*Electrically Reversible.
**Also Available for D.C.
***Shutter Attached.

V. E. SPROUSE CO., INC.

1804 22nd St. Columbus, Indiana

VE-5130-4V	AV	30"	4	1	$ 85.25*
VE-5136-4V	AV	36"	4	1	89.75*
VE-5142-3V	AV	42"	4	1	135.75*
VE-5130-4H	AV	30"	4	1	95.00*
VE-5136-4H	AV	36"	4	1	105.00*
VE-5142-3H	AV	42"	4	1	122.50*

*Plus 10% Mfrs. Excise Tax.

STANDARD ELECTRIC MFG. CO., INC.

West Berlin, N. J

VF10	EX	10"	5	1 & 3
VF12	EX	12"	4	1 & 3
VF14	EX	14"	4	1 & 3
VF16	EX	16"	3	1 & 3
HD16A	EX	16"	3	1
HD18A	EX	18"	3	1
HD20A	EX	20"	3	1
HD24A	EX	24"	3	1
HD16B	EX	16"	3	1
HD18B	EX	18"	3	1
HD20B	EX	20"	3	1
HD24B	EX	24"	3	1
HD16C	EX	16"	3	2
HD18C	EX	18"	3	2
HD20C	EX	20"	3	2
HD24C	EX	24"	3	2
HD16AA	EX	16"	3	1
HD18AA	EX	18"	3	1
HD20AA	EX	20"	3	1
HD24AA	EX	24"	3	1
BD24RV	AV	24"	3	1
BD24SV	AV	24"	3	1
BD30AR	AV	30"	4	1
BD30BR	AV	30"	4	1
BD30CR	AV	30"	4	1
BD36AR	AV	36"	4	1
BD36BR	AV	36"	4	1
BD36CR	AV	36"	4	1
BD42BR	AV	42"	4	1
BD42CR	AV	42"	4	1
BD42DR	AV	42"	4	1
BD48CR	AV	48"	4	1
BD48DR	AV	48"	4	1
BD48ER	AV	48"	4	1

STEWART MANUFACTURING CO. INC.

320 St. Joseph St. Indianapolis 2, Ind.

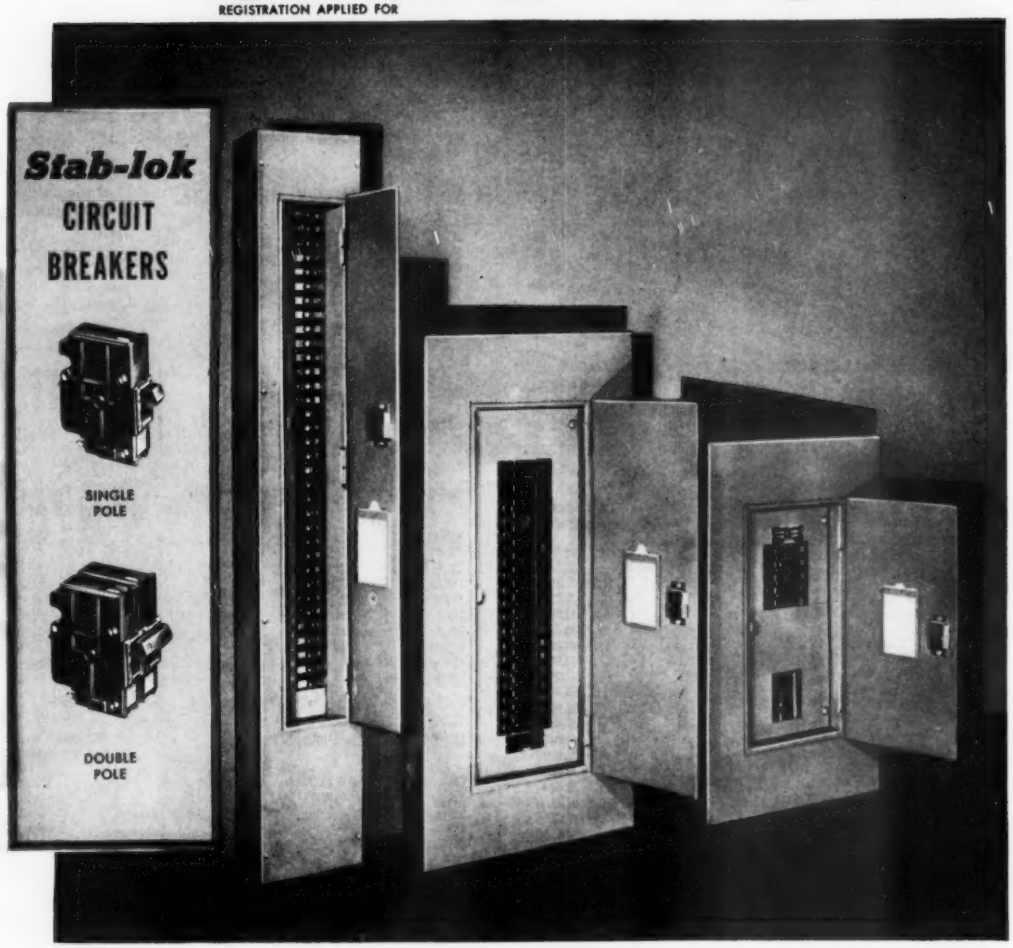
Kitchen-Aire 6	K	Centrifugal Impeller	1	$49.95

Cat. No.	Type (See Key)	Size of Blades	No. of Blades	No. of Speeds	List Price
SUPERIOR ELEC. PROD. CORP.					1507-17 Independence Cape Girardeau, Mo.
1201	DD	12"	4	1	$ 17.95
1101	DD	10"	4	1	13.95
1101P	PD	10"	4	1	21.95
1050W	WV	10"	4	1	17.95
THE O. A. SUTTON CORP.					1812 West Second St. Wichita, Kansas
16C	DS	6⅝"	3	2	$ 24.95
20C	DS	7¾"	3	2	31.95
24C	DS	9"	3	2	42.50
28C	DS	10½"	3	3	49.95
36C	DS	12"	3	3	58.95
36P	PS	12"	3	3	79.95
60P	PS	16"	3	3	129.95
16W	WV	6⅝"	3	2	34.95
30W	WV	10½"	3	3	58.95
40W	WV	12"	3	3	74.95
60W	WV	16"	3	3	99.95
30CF	WV	10½"	3	3	49.95
28F	O*	10½"	3	3	49.95
*Table Top.					
TENNESSEE VALLEY ASSOCIATES, INC.					117 Ninth Ave., N. Nashville 3, Tenn.
362-M	AV	36"	4	1	$116.80
420-3	AV	42"	4	1	154.40
480-2	AV	48"	4	1	189.20
TRADE-WIND MOTORFANS, INC.					5725 S. Main St. Los Angeles 37, Calif.
3501	C-K		2		$109.75 up
2501	C-K		2		57.50
1501	C-K		1 (2 Opt.)		37.50
1201	C-O		1 (2 Opt.)		26.00
18-FW	*		4		32.82
12-FW	*		4		39.73
12-FP	*		4		48.11
12-FPG	*		4		65.98
14-FW	*		4		47.25
16-FW	*		4		54.75
16-F	*		4		66.00
18-F	*		4		109.50
26-F	*		4		147.00
18-BW	*		**		72.19
18-BP	*		**		78.28
18-BW	*		**		86.40
25-B	*		**		104.06
30-B	*		**		117.00
40-B	*		**		134.63
45-B	*		**		162.75
*Evaporative Coolers. **Blower Wheels.					
UNIVERSAL BLOWER CO.					1090 S. Adams Ave. Birmingham, Mich.
Kitch-N-Ventor	K	8"	5	1	$ 36.00
Kitch-N-Ventor	K	10"	5	1	38.00
Range-Ventor	K	8"	5	1	60.00 up
Coil-N-Ventor	K	8"	5	1	28.00
U. S. AIR CONDITIONING CORP.					Como Ave., S. E. at 33rd Minneapolis 14, Minn.
440-Fwd. Curve Multi-Blade S1 & D1	V		48 to 64		Constant or Variable
52-Fwd. Curve Multi-Blade S1SW	V		48 to 64		
440-Type A Back, Inclined Blades-S1 & D1	V		12		Constant
VICTOR ELECTRIC PRODS., INC.					2950 Robertson Ave. Cincinnati 9, Ohio
V1107	K-WaV	10"	4	1	$ 32.75
V1108	K-WaV	10"	4	1	36.50
V1107C	K-C	10"	4	1	38.25
EX1108	EX	10"	4	1	19.00
EX1127	EX	12"	4	1	24.30
EX1167	EX	16"	4	1	31.70
V-1212	WV	2-12"	4	3	59.95
V18	K-WaV	8"	4	1	26.25
VIKING AIR CONDITIONING CORP.					5801 Walworth Ave. Cleveland 2, Ohio
636	AV	36"	4	1	
544	WV	22"	3	2	$80.50
533	WV	22"	3	1	64.50
W. W. WELCH CO.					700 Glenn Bldg. Cincinnati, Ohio
#12	AC	12"	4	3	$49.95
#11	AC	12"	4	3	49.95
#15	AC	18"	5	3	36.95
#24	EX	12"	4	3	69.95
#4	AC	12"	4	3	39.95
WESTINGHOUSE ELECTRIC CORP.					653 Page Blvd. Springfield 2, Mass.
16MA2	EX	16"	4	2	$70.95
10LA3	DO-BO	10"	4	1	16.95
12LA3	DO-BO	12"	4	2	26.95
16SD2	DO-BO	16"	4	3	44.95
16WF	EX	16"	4	2	49.95
16DA	FC	16"	4	2	54.95
10DA	FC	10"	3	1	34.95
10PHV	WAV	10"	3	1	38.95
16WAP2	PS	16"	4	2	89.95
16WA2	PS	16"	4	2	74.95
WEST WIND CORP.					1800 Airport Way Seattle 4, Washington
101	K-WaV	9"	8	3	$52.75
601	K-WaV	9"	8	1	35.00
858	K-C	5½" dia.	2-Blower	3	54.80
301	WV	9"	8	1	49.00
501	V	9"	8	1	26.50
WILSTER, INC.					5700 Detroit Ave. Cleveland 2, Ohio
No. 110	C	20"	4	Variable	
No. 220T	C	12"	4	Variable	
No. 220 TL	C	12"	4	Variable	
WIND-WAY FAN & VENTILATOR CO.					531 St. Joseph St. New Orleans 12, La.
9150	AV	30-48	4	1	$118.00-293.00
1149	WV	30-48	4	1	96.00-282.00
5151	EX	30-48	4	1	94.00-282.00
8148	O	17-36	5	1	80.00-475.00
7149	O	19-48	4 & 5	1	175.00-935.00

THERE'S A LOT OF NEW

Stab-lok

REGISTRATION APPLIED FOR



YOU'VE GOT every winning argument with Stab-lok Panelboards! By carrying only a small stock of enclosures and Stab-lok Circuit Breakers you eliminate your customers waiting for factory assemblies and give them *on-the-spot deliveries*. Your customers assemble Stab-lok Panelboards in a matter of minutes . . . and can meet practically any requirement up to 42 circuits.

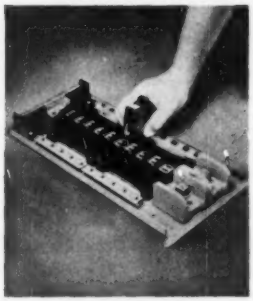
And look at these other Stab-lok Panelboard design advantages: The whole interior can be quickly removed to give complete box accessibility for wire pulling. The trim lines up automatically. Polarity sequence bussing provides complete flexibility for most any circuit requirement.

Write for full information about Federal Noark Stab-lok Panelboards. And order your stock now. They're today's lowest-priced panelboards and they've got everything that assures extra sales and profits. Federal Electric Products Company, 50 Paris St., Newark 5, New Jersey.

BUSINESS FOR YOU WITH

PANELBOARDS

WHY STAB-LOK PANELBOARD IS QUICKEST, EASIEST TO INSTALL

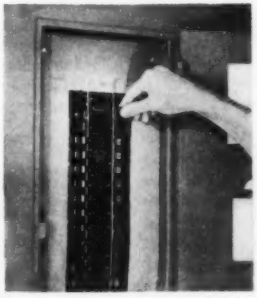


BREAKERS SNAP IN PLACE: Just snap Stab-lok Circuit Breakers in place! All you do is slide end of breaker over rugged metal hook and press the 4-way stabs into proper slot in bussing. No screws! No tools! Slots take either single or double pole Stab-lok breakers.

REMOVABLE INTERIORS: Stab-lok Panelboard interiors are mounted on a back plate. Simply lift interior from box. This gives complete box accessibility for quick wire pulling. To replace, merely hang the interior on support bracket.

ONE MAN INSTALLATION: Mounting Stab-lok Panelboard trim is a cinch for one man. Trim hangs on a support bracket, leaving wireman's hands free to work. Trim mounting screw holes always line up automatically.

AUTOMATIC ALIGNMENT: If box is installed at an angle, shift (trim front) to vertical and tighten trim holding screws. And springs force breaker assembly against front, giving automatic plaster alignment.



DEAD FRONT FOR SAFETY: Filler plates are available to fill unused spaces and give the panelboard a solid, unbroken front eliminating danger of contacting live terminals. With trim installed and door locked, panelboard is tamperproof.

COMPLETE FLEXIBILITY: Polarity sequence bussing provides a flexibility that meets most any circuit requirement. All breakers are interchangeable and can be replaced by breakers of other ampere ratings. You just pry them out.

FEDERAL NOARK

Complete line of Federal Electric Products includes Motor Controls, Safety Switches, Service Equipment, Circuit Breakers, Panelboards, Switchboards, Control Centers, Bus Duct ★ Sales offices in principal cities.

Get a bigger share of the billion-dollar giftware market

New The Saturday Evening POST promotion kit gives dealers display material to tie in with electric-housewares gift campaign!

LAST YEAR The Saturday Evening Post took the lead in cooperating with NEMA's effort to get a bigger share of the giftware market. The Post's special promotion kit went to the nation's top dealers. Those who used the display material were enthusiastic. They reported many comments from customers, increased store traffic, and increased sales. This year the Post's promotion kit is bigger and fuller than ever. It will go to the nation's 5,000 leading electric retailers. Make a note right now to wait for your copy of this kit before you plan your May and June displays.

Display card. Use this colorful display card in windows, on counters, and on your walls. It is designed to fit in with NEMA's display material. It shows customers that your store is headquarters for electric housewares. It reminds them to think of you and the products you sell when they think of gifts. And it shows them that you handle the brands that America trusts—and wants—most, the brands that are advertised in The Saturday Evening Post. It bears the greatest merchandising seal in the retail business, the seal of a "Post Recognized Value."

Over-the-wire pennants. In the Post's 1952 electric-housewares promotion kit you'll find a separate over-the-wire pennant for every single item featured in the Post for the first six months of this year. When you hang these pennants, you catch the eyes and the dollars of your best customers. For Post families are the best customers for almost every type of product sold. They own their own homes. They make good money. They live well. And good living for them means good selling for you.

Plan Book. The heart of the Post's promotion kit is this Plan Book. It contains specially designed display and merchandising tips on how to slice yourself a bigger share of the giftware market. It was prepared by specialists in selling electrical housewares. Its suggestions are based on experience. It is full of practical, hard-selling ideas for the average retailer. This book is typical of the merchandising aids supplied by the Post. You'll want to save it and refer to it again and again. It can help you make the coming May and June the most successful you've ever had. So get ready now. Your copy of this kit will be mailed within the next couple of weeks.

The Saturday Evening POST -gets to the heart of America

Free Booklets

tell all about aluminum wire

Get the full facts about United States Rubber Company's Aluminum Wires and Cables. These two clearly written, informative booklets are packed with data on specifications, standards, photographs showing stripping, joining, soldering—installation facts of all kinds, plus property tables. In addition, there is a table showing how "U. S." Aluminum wire's insulation properties compare with Underwriters' Laboratory Standards.

These booklets are FREE. Send for your copies today!

United States Rubber Company

Electrical Wire and Cable Department
1230 Avenue of the Americas
ROCKEFELLER CENTER • NEW YORK 20, N. Y.

Yours for the asking...

EXPERT COUNSEL AND ADVICE ON POWER AND LIGHT DISTRIBUTION PROBLEMS

A COMPLETE LIST OF Ⓕ REPRESENTATIVES

is shown in Sweets' Architectural-Engineering and Builder files.

• These men are strategically located in major cities of the country. They are within a few hours of almost any community.

• So don't hesitate to call on them for help and assistance.

DEVELOPMENT of an effective system of power and light control for an industrial or commercial plant or other building — one that is not only adequate for present-day needs, but allows for future expansion — is not an easy job as any engineer, plant superintendent or contractor will agree.

That's why Frank Adam Electric Company maintains a coast-to-coast organization of sales engineers — specialists in power distribution and control.

These men will gladly assist you in your planning, will furnish latest engineering data on Ⓕ products, or render a complete survey and report on individual problems.

The next time you have a job that involves lighting and power control, consult your nearest Ⓕ representative.

Frank Adam Electric Co.

P. O. BOX 357 ST. LOUIS 3, MISSOURI

Our 61st Year

Makers of BUSDUCT • PANELBOARDS • SWITCHBOARDS • SERVICE EQUIPMENT • SAFETY SWITCHES • LOAD CENTERS • QUIKHETER

See the Sensationally New

NOMA LIGHT

"Firsts" for '52

Mr. Safety Fuse Plug says: I'LL SEE YOU AT THE TOY FAIR

March 10th to 19th Inclusive
East Room, First Mezzanine
Hotel McAlpin, New York

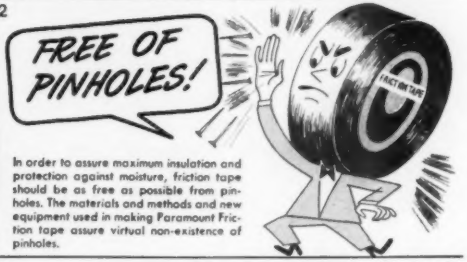
NOMA ELECTRIC CORPORATION 55 West 13th Street, New York, N. Y.

PARAMOUNT · FRICTION TAPE by Haartz-Mason

1

Made under the most exacting requirements in the industry, Paramount Friction tape can be tightly wrapped — yet can be torn readily as required. A margin of safety in this respect is added to every roll of Paramount Friction tape.

2



In order to assure maximum insulation and protection against moisture, friction tape should be as free as possible from pinholes. The materials and methods and new equipment used in making Paramount Friction tape assure virtual non-existence of pinholes.

3

Automatically cut with smooth, neat edges on Cameron cutting machines. These machines wind it on the cores under tension. This is your insurance against ravelling.

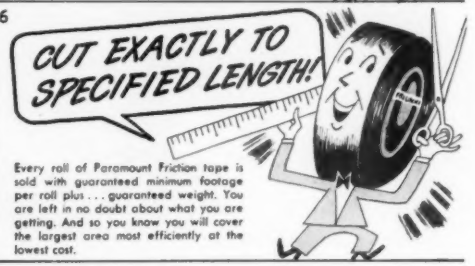
4

Under controlled temperature and humidity, Paramount Friction tape is strictly tested for permanence of adhesion.

5

Taken from stock at regular intervals, sample rolls of Paramount Friction tape undergo accelerated aging tests in an electric oven at 212° F. for 16 hours. Thus you get a guarantee of maximum aging ability.

6



Every roll of Paramount Friction tape is sold with guaranteed minimum footage per roll plus . . . guaranteed weight. You are left in no doubt about what you are getting. And so you know you will cover the largest area most efficiently at the lowest cost.

7

To sum up, Paramount Friction tape, besides being made of finest materials, also undergoes rigorous pre-testing at the factory. Among the rigidly conducted tests are those for aging, adhesion and strength.

Dual Guarantee on Weight and Length

Manufactured by

Haartz-Mason, Inc.

WATERTOWN 72, MASS.

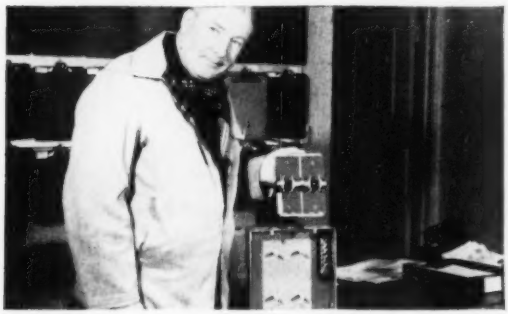
By Invitation Member
Emblem of BUSINESS CHARACTER
Rice Leaders of the World Association
Represents High Standing in NAME · PRODUCT · POLICY

A. A. ANDERSON,
ELECTRICAL CONTRACTOR,
PROVES

TRUMBULLITE gives you and your customer today's best break in load centers!

Mr. Anderson: *"Your customer gets the best break in* TRUMBULLITE, *with the first plug-in, quick-make, quick-break breakers ever used in a load center."*

And don't forget the break *you* get, Mr. A., in TRUMBULLITE's fast sales. No wonder! It's the first load center with panelboard features at load center prices. Any Trumbull TQL breaker of any current rating physically fits the TRUMBULLITE busbar and stab assembly. Ratings come in: 10, 15, 20, 30, 40, 50 amp, 120 v a-c, 120/240 v a-c. And you can have two-pole operation by means of a handle extension.



Mr. Anderson: *"You get another break, too . . . because* TRUMBULLITE *can be installed quicker and easier."*

Right! See those four compression springs. They allow you to mount the interior without screws, or easily remove it for wiring . . . they make it a cinch to "line-up" fronts even if boxes are installed crooked. TRUMBULLITE has plenty of knockouts that speed up wiring. And you don't have to worry about overheating, for the busbars are molded in Plastisol, that remarkable new insulating material.

Mr. Anderson: *"The lower inventory needed with* TRUMBULLITE *is another break. Trumbull's unique design and packaging allow you to assemble circuit-breaker combinations to order."*

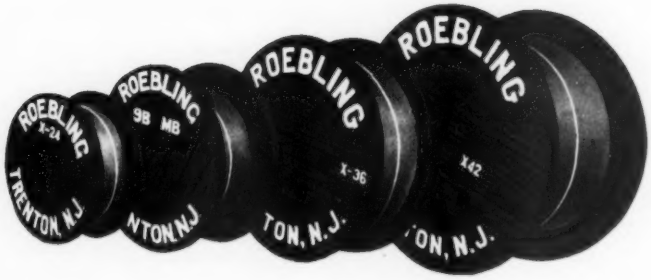
Enclosures and interiors are packed separately. Space is left in carton for distributor or contractor to add flush or surface front and whatever breakers are required for any particular installation. Only one- and two-circuit TRUMBULLITES are factory assembled.

Write for bulletin TEB-12 on TRUMBULLITE Load Centers

TRUMBULL (T) ELECTRIC

DEPARTMENT OF GENERAL ELECTRIC COMPANY
PLAINVILLE, CONN.

PACKAGED FOR PROTECTION..



ALL ROEBLING WIRES AND CABLES are packaged with utmost care to assure protection against damage during shipment. Reels are constructed with reinforced, plied heads, in accordance with IPCEA specifications and they exceed these specifications in both strength and rigidity. Wrappings and cartons, also, are made of finest quality materials for extra ruggedness and durability.

And on top of that, distributors find that Roebling's larger, easy-to-read labels are a big help to instant and accurate identification of wire and cable types and sizes.

Details such as these are typical of Roebling's firmly established policy to produce an electrical wire and cable line that is ideal for wholesale distribution. This policy includes giving wholesalers a top quality wire or cable for every purpose... the maintenance of strategical sources of supply... continuous full-page, colorful advertising directed to all your customers and prospects.

Even under today's conditions, wholesalers can look to us for all possible cooperation. Write for information about Roebling distribution in your territory. John A. Roebling's Sons Company, Trenton 2, New Jersey.

..AND LABELED FOR READING!

GOOD PRODUCTS. Using the most modern equipment, the Roebling Wire and Cable Laboratory is constantly developing and testing new methods of producing the finest of products.

COMPLETE LINE. When you sell Roebling wires and cables you have a type that meets all of your customers' transmission, distribution and service needs.

WELL ADVERTISED—WELL KNOWN. Every month of every year your prospects are told about Roebling wires and cables in full page, color advertisements in a host of publications.

ENGINEERING ASSISTANCE. Help a customer and you win a friend. Technical assistance by Roebling engineers is available to you and your customers whenever needed.

ROEBLING

ATLANTA, 934 AVON AVE. • BOSTON, 21 BLEECKER ST. • PITTSBURGH ST. • CHICAGO, 5525 W. ROOSEVELT RD. • CINCINNATI, 2828 FREDONIA AVE. • CLEVELAND, 7911 ST. CLAIR AVE., N. E. • DENVER, 4801 JACKSON ST. • DETROIT, 315 FISHER BLDG. • HOUSTON, 6216 NAVIGATION BLVD. • LOS ANGELES, 5909 E. HARBOR ST. & 1201 S. HEWITT ST. • NEW YORK, 19 RECTOR ST. • ODESSA, TEXAS, 1900 E. 2ND ST. • PHILADELPHIA, 230 VINE ST. • PITTSBURGH 1501 CLIPPY BLDG. • ROCHESTER, 1 FLINT ST. • SAN FRANCISCO, 1740 17TH ST. • SEATTLE, 900 1ST AVE. S. • ST. LOUIS, 3115 GRAHAM BLVD. • TULSA, 321 S. BOULDER ST. • EXPORT SALES OFFICE: TRENTON 2, NEW JERSEY

ACME ELECTRIC
DRY TYPE TRANSFORMERS

are Bought... not Sold!

When one of your customers decides to save money and time by distributing power at a high voltage and eliminate double wiring, operate 120 volt equipment from power circuits, provide a 3-wire secondary circuit from a two-wire source of supply, boost voltage, balance voltage, or insulate a circuit, you have a ready made buyer for Acme Electric Air Cooled Dry Type transformers.

The applications for these transformers are created by necessity, good plant engineering and experienced maintenance, which leaves you only with the need to point out feature by feature the greater values of Acme Electric Air Cooled, Dry Type transformers.

Every Acme Electric design shows sturdy construction and simple, practical features for installation. Their performance characteristics exceed the standards established by the American Institute of Electrical Engineers. Constructed from materials of highest quality, to assure long life and trouble-free service.

Familiarize yourself with the Acme Electric line of Air Cooled, Dry Type transformers. Write for Bulletin AC-185 describing single phase transformers Class A and Class B insulation from 1/10 KVA to 167 KVA. All standard voltages up to 600 with taps. Distribution transformers from 3 to 100 KVA, 2400/4160Y primary volts. Phase changing transformers from 3 to 50 KVA. Bulletin AC-186 lists 3 phase transformers from 9 to 225 KVA.

Acme Electric manufactures Luminous Tube Transformers • Air Cooled, Dry Type Power Transformers, Class A and Class B Insulation, Single and 3 Phase • Electronic Transformers • Television Transformers • Radio Transformers • Radar Transformers • Bell Ringing Transformers • Chime Transformers • Voltage Regulating Transformers • Safety Transformers • Signalling Transformers • Stepdown Transformers • Control Transformers • Sign Lighting Transformers • Oil Burner Ignition Transformers • Fluorescent Lamp Ballasts • Cold Cathode Lighting Transformers and Ballasts • Voltage Stabilizers • Battery Chargers.

ACME ELECTRIC CORPORATION
673 WATER STREET CUBA, NEW YORK

Acme ACME Electric
TRANSFORMERS

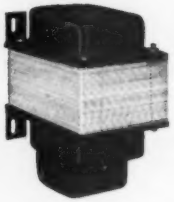


FIGURE A
1/10th to 1 KVA, may be mounted vertically or horizontally. Class A insulation only.

FIGURE C
A compact design that may be mounted in any convenient position. Multiple size knockouts in large lead compartment.

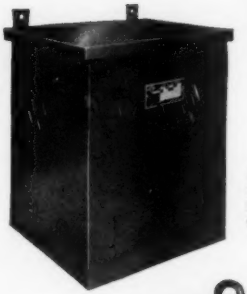


FIGURE G
For outdoor or indoor installation supplied with wall brackets which are integral with frame.

FIGURE J
For platform mounting only, supplied with mounting rails and eye nuts.

FIGURE F
Three phase construction offers drip proof cover and damage proof case. Multiple knockouts simplify installation.

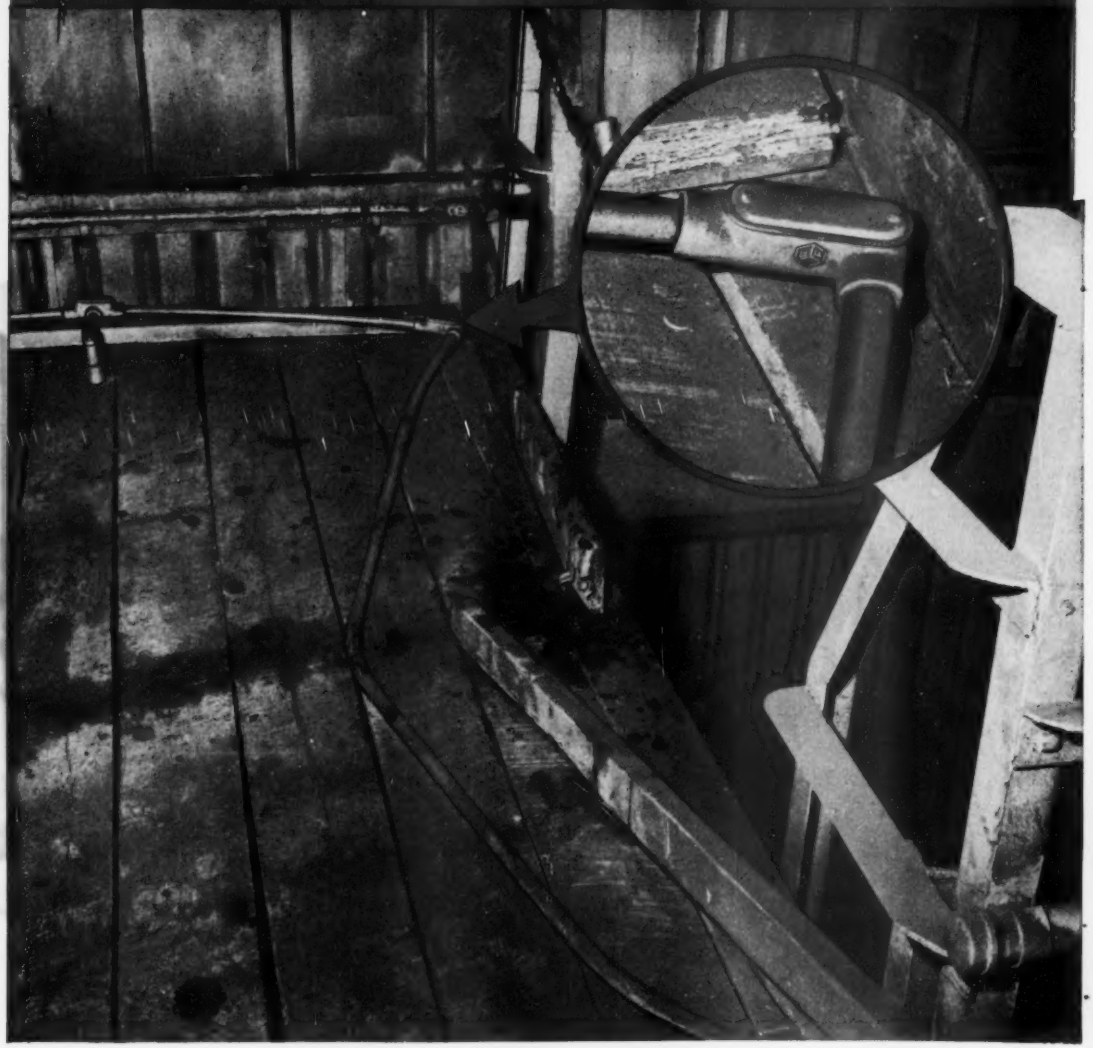
Midwest Electric Mfg. Company

MANUFACTURERS OF ELECTRICAL WIRING PRODUCTS

1439 W. WALNUT STREET

Chicago 12, Illinois

The CONDULET* and rigid



Photograph of an actual case which proves the protective value of CONDULETS and rigid conduit. In an iron foundry, the conduit was accidentally hit by a heavy bucket full of iron, which bent it 21½ inches out of alignment and exerted a heavy strain on the CONDULETS. The CONDULETS withstood the pressure and there was:

NO distortion of the CONDULET. Cover remained tight
NO interruption of electrical service
NO shutdown
NO lost production

*CONDULET is a coined word registered in the U. S. Patent Office. It designates a product made only by the Crouse-Hinds Company.

CONDULETS · TRAFFIC SIGNALS

conduit method gives you the
UTMOST PROTECTION
to electrical conductors

To maintain continuous production, it is important that all electrical wiring be protected against accidental mechanical damage which might result in costly shutdowns. Crouse-Hinds cast Feraloy **CONDULETS** and rigid conduit give you the best possible protection to electrical wiring and equipment.

The illustration at the left is an actual photograph of the kind of accident that is not uncommon in industry. Traveling cranes, electric trucks, or other heavy moving equipment frequently strike the electrical system. **CONDULETS** and rigid conduit can protect your electrical installations from damage by such accidents.

Remember . . . it pays to give your electrical system the protection that is only provided by the **CONDULET** and rigid conduit method.

Other Definite advantages

- **MECHANICAL PROTECTION.** Crouse-Hinds sturdy cast Feraloy CONDULETS and rigid conduit provide the best possible protection against accidental damage to the wiring and equipment. Prevents costly shutdowns.
- **FLEXIBILITY.** A modern CONDULET installation provides for growth and changing conditions. CONDULETS with detachable hub plates can be used to make it easy to change circuits or add new ones.
- **ECONOMY.** The installed cost of Crouse-Hinds CONDULETS and rigid conduit compares favorably with other wiring methods. The added advantages make it the really economical method that pays dividends over the years.
- **UNIVERSAL APPLICATION.** You can install galvanized CONDULETS and galvanized rigid conduit under all atmospheric conditions and in all occupancies.
- **CORROSION RESISTING.** Cast Feraloy CONDULETS give the best protection wherever moisture, dust, or corrosive atmospheres are present.
- **QUALITY.** The trademark CONDULET stands for the highest quality, reliability, and long life.
- **VARIETY.** More than 15,000 items are listed in the CONDULET Catalog, including a complete explosion-proof and dust-tight line for use in hazardous locations.

On YOUR next electrical layout, plan to get all the benefits of sturdy cast Feraloy **CONDULETS** and rigid conduit . . . the universal wiring method.

A Nationwide Distribution Through Electrical Wholesalers

CROUSE-HINDS COMPANY
Syracuse 1, N. Y.

OFFICES: Albuquerque—Birmingham—Boston—Buffalo—Chicago—Cincinnati—Cleveland—Dallas—Denver Detroit—Houston—Indianapolis—Kansas City—Los Angeles—Milwaukee—Minneapolis—New York Philadelphia—Pittsburgh—Portland, Ore.—San Francisco—Seattle—St. Louis—Washington.
RESIDENT REPRESENTATIVES: Albany—Atlanta—Baltimore—Charlotte—New Orleans—Richmond, Va.
Crouse-Hinds Company of Canada, Ltd., Toronto, Ont.

CONDULET — First in the field — STANDARD OF QUALITY

AIRPORT LIGHTING • FLOODLIGHTS

How Can America Produce All the Steel It Needs ... for Military... and Civilian Purposes?

FREE BOOKLET Tells How to Conduct Scrap Salvage Program in *Your* Business.

Address Advertising Council, 25 W. 45th St., New York 19, N. Y.

One way is to feed more pig iron into the furnaces. But . . .

That will require *more* supplies of ore, limestone, coal, etc.*—to say nothing of more new ore boats and rail cars to transport the additional supplies.

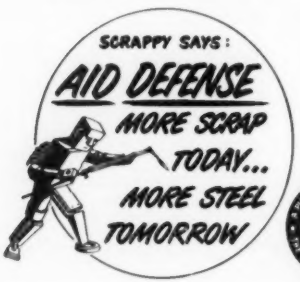
A better way—the *only* practical way—is to use the *dormant* iron and steel scrap lying around in the form of old machines, equipment, tools and metal structures.

Your business *must* have available scrap—in *some* form. That scrap is *needed* to keep the furnaces going in the steel mills . . . to keep our fighting forces and our allies well armed . . . to sustain our civilian life at home.

Think how many ways *you* use iron and steel. Think what would happen if it became extremely scarce. Put your iron and steel scrap to good use—now—by selling it to your local scrap dealer.

Don't delay—the emergency is becoming more severe every day.

*For every ton of scrap fed into the furnaces, we save approximately 2 tons of iron ore, 1 ton of coal, nearly ½ ton of limestone and many other critical materials. Also, scrap helps make steel faster, shortens the refining process.



NON-FERROUS SCRAP IS NEEDED, TOO!

This advertisement is a contribution, in the national interest, by

McGRAW-HILL PUBLISHING COMPANY, INC.

330 WEST 42nd STREET NEW YORK 18, N.Y.

With the introduction of the Models "1200" and "600" for industrials, utilities and contractors, Amprobe widens its leadership in the snap-around volt-ammeter field.

Hand these 2 superb instruments to your customer. He will quickly recognize the advanced engineering that makes the "1200" and "600" *more dependable, more versatile, safer, easier to use and easier to carry* than any other snap-around high-current meter.

Priced "right" too: $67.50 for the Amprobe "1200", $59.50 for the "600", complete with leather case and test leads. And backed by the *heaviest advertising campaign in Amprobe history!* Pyramid Instrument Corp., Lynbrook, New York. (Export Division: 458 Broadway, N. Y. C. Cable: Morhanex).

AMPROBE®

the only pocket-size snap-around volt-ammeter

WRITE TODAY: Dept. J32

Pyramid Instrument Corp.
Lynbrook, New York

☐ *Send Bulletin No. 128, describing new Amprobe Models "1200" and "600".*

☐ *Send 16-page manual of time-saving uses: "Servicing with the Amprobe".*

Name _____

Company _____

Address _____

City _____ Zone _____ State _____

We Prefer

CONTRACTOR

I can make up any combination right on the job from a few basic parts. They're easy to install and wire too.

ARCHITECT

Interchangeable Devices have helped build my reputation for better, more convenient layouts, and, in addition, they've simplified my specification jobs.

OWNER

This is exactly what we wanted, and it cost far less than I'd figured. These neat, compact switch panels give real convenience and save lots of steps.

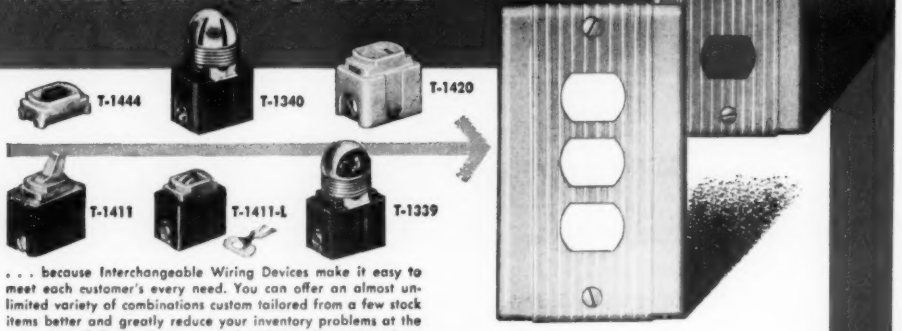
ARROW ELECTRIC DIVISION

INTERCHANGEABLE *Wiring Devices* WITH *NEW* UNILINE DESIGN PLATES

92041

MANUFACTURED BY THE ARROW-HART & HEGEMAN ELECTRIC COMPANY

...AND *You will Profit* WHEN YOU PROMOTE THIS LINE



. . . because Interchangeable Wiring Devices make it easy to meet each customer's every need. You can offer an almost unlimited variety of combinations custom tailored from a few stock items better and greatly reduce your inventory problems at the same time. Talk to contractors and architects in your territory about the advantages of Interchangeable Wiring Devices. Ask for the orders.

For complete information about **INTERCHANGEABLE** Wiring Devices and all the other items in our complete line, send for our fully illustrated catalog. Write to:

1603 Laurel Street, Hartford 6, Connecticut.

Branches in: BOSTON, CHICAGO, DALLAS, DENVER, DETROIT, LOS ANGELES, NEW YORK, PHILADELPHIA, SAN FRANCISCO, SYRACUSE.

In Canada: ARROW-HART & HEGEMAN (CANADA) LTD., MT. DENNIS, TORONTO.

WIRING DEVICES
ENCLOSED SWITCHES

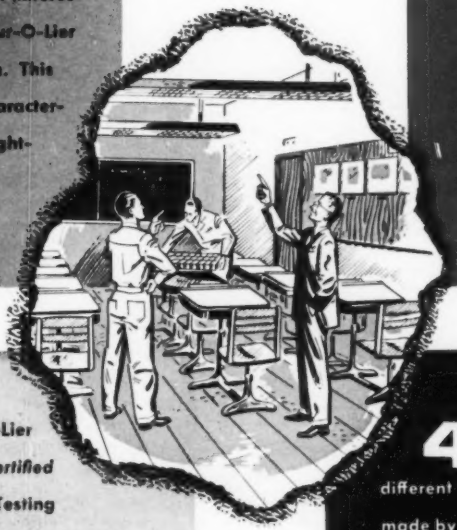
ARROW ELECTRIC DIVISION

THE ARROW-HART & HEGEMAN ELECTRIC CO.
HARTFORD 6, CONNECTICUT

YOU GET 4 EXCLUSIVE ADVANTAGES WHEN YOU SPECIFY

FLEUR·O·LIER

1 Only Fleur-O-Lier fixtures are rated on the Fleur-O-Lier Index Rating System. This gives illuminating characteristics, shielding, brightness, etc., for each fixture.



2 Complete photometric test data including distribution curves and coefficients of utilization tables are computed by Electrical Testing Laboratories, Inc., and are provided for every Fleur-O-Lier luminaire.

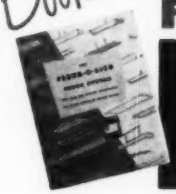
3 Fleur-O-Lier fixtures are *certified* by Electrical Testing Laboratories, Inc., as complying with rigid specifications covering electrical and mechanical construction.

4 More than 300 different Fleur-O-Lier fixtures made by nearly 30 manufacturers give you a wide selection from which to choose.

THESE 4 ADVANTAGES ASSURE *Lighting Satisfaction* WHEN YOU SPECIFY FLEUR-O-LIER

Free Booklet

Write for your free copy of the new booklet giving complete details of the Fleur-O-Lier Index System.

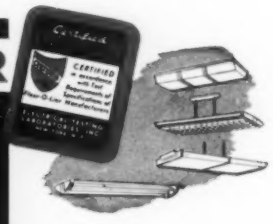


FLEUR·O·LIER

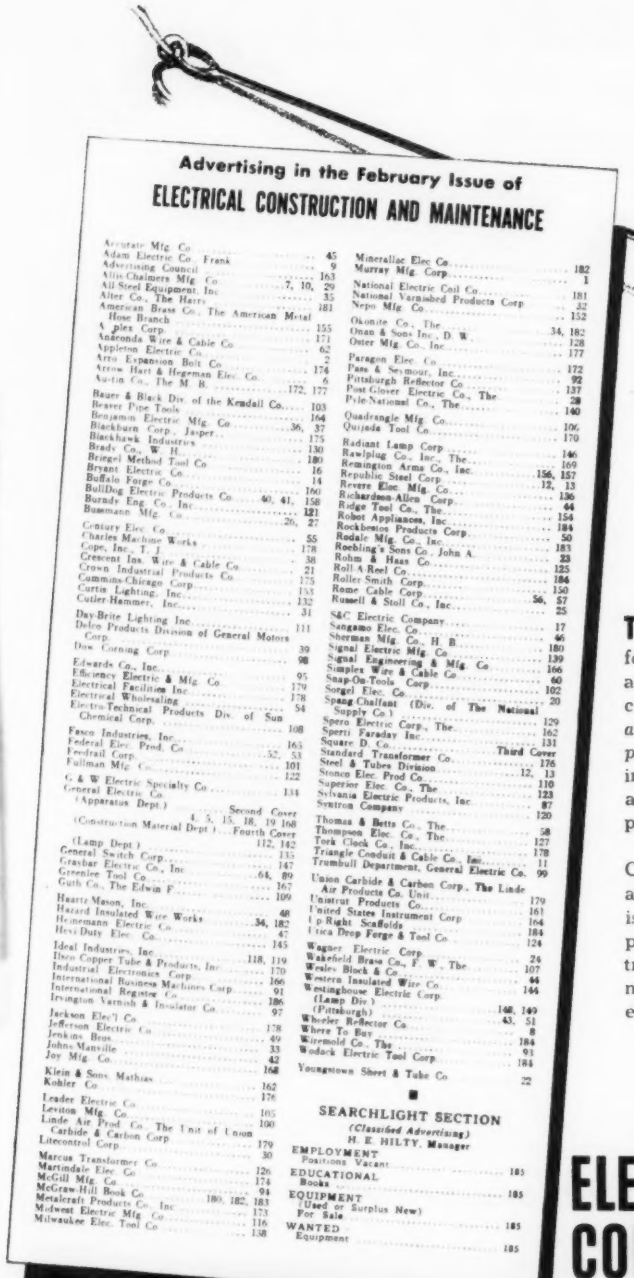
Manufacturers

2116 Keith Building • Cleveland 15, Ohio

Fleur-O-Lier is not the name of an individual manufacturer but of a group of fixtures made by leading manufacturers. Participation in the Fleur-O-Lier program is open to any manufacturer who complies with Fleur-O-Lier requirements.



Baiting your sales hook



Advertising in the February Issue of

ELECTRICAL CONSTRUCTION AND MAINTENANCE

Accurate Mfg. Co. ... 45
Adam Electric Co., Frank ... 9
Advertising Council ... 163
Allis-Chalmers Mfg. Co. ... 7, 10, 29
All-Steel Equipment Inc. ... 35
Alter Co., The Harry ... 181
American Brass Co., The American Metal Hose Branch ... 155
Amplex Corp. ... 171
Anaconda Wire & Cable Co. ... 62
Appleton Electric Co. ... 2
Arco Expansion Bolt Co. ... 174
Arrow Hart & Hegeman Elec. Co. ... 6
Austin Co., The M. B. ... 172, 177
Bauer & Black Div. of the Kendall Co. ... 103
Beaver Pipe Tools ... 164
Benjamin Electric Mfg. Co. ... 36, 37
Blackburn Corp., Jasper ... 175
Blackhawk Industries ... 130
Brady Co., W. H. ... 180
Bridgel Method Tool Co. ... 16
Bryant Electric Co. ... 14
Buffalo Forge Co. ... 160
BullDog Electric Products Co. ... 40, 41, 158
Burndy Eng. Co., Inc. ... 121
Bussmann Mfg. Co. ... 26, 27
Century Elec. Co. ... 55
Charles Machine Works ... 178
Cope, Inc., T. J. ... 38
Crescent Ins. Wire & Cable Co. ... 21
Crown Industrial Products Co. ... 175
Cummins-Chicago Corp. ... 153
Curtis Lighting, Inc. ... 132
Cutler-Hammer, Inc. ... 31
Day-Brite Lighting Inc. ... 111
Delco Products Division of General Motors Corp. ... 39
Dow Corning Corp. ... 98
Edwards Co., Inc. ... 95
Efficiency Electric & Mfg. Co. ... 179
Electrical Facilities Inc. ... 178
Electrical Wholesaling ... 54
Electro-Technical Products Div. of Sun Chemical Corp. ... 108
Fasco Industries, Inc. ... 165
Federal Elec. Prod. Co. ... 52, 53
Feedrail Corp. ... 101
Fullman Mfg. Co. ... 122
G & W Electric Specialty Co. ... 134
General Electric Co. (Apparatus Dept.) ... Second Cover
(Construction Material Dept.) ... 4, 5, 15, 18, 19 168 Fourth Cover
(Lamp Dept.) ... 112, 142
General Switch Corp. ... 135
Graybar Electric Co., Inc. ... 147
Greenlee Tool Co. ... 64, 89
Guth Co., The Edwin F. ... 167
Haartz Mason, Inc. ... 109
Hazard Insulated Wire Works ... 48
Heinemann Electric Co. ... 34, 182
Hevi-Duty Elec. Co. ... 47
Ideal Industries, Inc. ... 145
Ilsco Copper Tube & Products, Inc. ... 118, 119
Industrial Electronics Corp. ... 170
International Business Machines Corp. ... 166
International Register Co. ... 91
Irvington Varnish & Insulator Co. ... 186
Jackson Elec'l Co. ... 97
Jefferson Electric Co. ... 178
Jenkins Bros. ... 49
Johns-Manville ... 33
Joy Mfg. Co. ... 42
Klein & Sons, Mathias ... 168
Kohler Co. ... 162
Leader Electric Co. ... 176
Leviton Mfg. Co. ... 165
Linde Air Prod. Co., The (Unit of Union Carbide & Carbon Corp.) ... 100
Litecontrol Corp. ... 179
Marcus Transformer Co. ... 30
Martindale Elec. Co. ... 126
McGill Mfg. Co. ... 174
McGraw-Hill Book Co. ... 94
Metalcraft Products Co., Inc. ... 180, 182, 183
Midwest Electric Mfg. Co. ... 173
Milwaukee Elec. Tool Co. ... 138
Mineallac Elec Co. ... 182
Murray Mfg. Corp. ... 1
National Electric Coil Co. ... 181
National Varnished Products Corp. ... 32
Nepo Mfg. Co. ... 152
Okonite Co., The ... 34, 182
Onan & Sons Inc., D. W. ... 128
Outer Mfg. Co., Inc. ... 177
Paragon Elec. Co. ... 172
Pass & Seymour, Inc. ... 169
Pittsburgh Reflector Co. ... 92
Post-Glover Electric Co., The ... 137
Pyle-National Co., The ... 28, 140
Quadrangle Mfg. Co. ... 106
Quijada Tool Co. ... 170
Radiant Lamp Corp. ... 146
Rawlplug Co., Inc., The ... 169
Remington Arms Co., Inc. ... 156, 157
Republic Steel Corp. ... 12, 13
Richardson-Allen Corp. ... 136
Ridge Tool Co., The ... 44
Robot Appliances, Inc. ... 154
Rockbestos Products Corp. ... 184
Rodale Mfg. Co., Inc. ... 50
Roebling's Sons Co., John A. ... 183
Rohm & Haas Co. ... 23
Roll-A-Reel Co. ... 125
Roller Smith Corp. ... 184
Rome Cable Corp. ... 150
Russell & Stoll Co., Inc. ... 56, 57
S&C Electric Company ... 25
Sangamo Elec. Co. ... 17
Sherman Mfg. Co., H. B. ... 46
Signal Electric Mfg. Co. ... 180
Signal Engineering & Mfg. Co. ... 139
Simplex Wire & Cable Co. ... 166
Snap-On-Tools Corp. ... 60
Sorgel Elec. Co. ... 102
Spang-Chalfant (Div. of The National Supply Co.) ... 20
Sperro Electric Corp., The ... 129
Sperti Faraday Inc. ... 162
Square D. Co. ... 131
Standard Transformer Co. ... Third Cover
Steel & Tubes Division ... 176
Stonco Elec. Prod Co. ... 12, 13
Superior Elec. Co., The ... 110
Sylvania Electric Products, Inc. ... 123
Syntron Company ... 87, 120
Thomas & Betts Co., The ... 58
Thompson Elec. Co., The ... 127
Tork Clock Co., Inc. ... 178
Triangle Conduit & Cable Co., Inc. ... 11
Trumbull Department, General Electric Co. ... 99
Union Carbide & Carbon Corp., The Linde Air Products Co. Unit ... 179
Unistrut Products Co. ... 161
United States Instrument Corp. ... 164
Up Right Scaffolds ... 184
Utica Drop Forge & Tool Co. ... 124
Wagner Electric Corp. ... 24
Wakefield Brass Co., F. W., The ... 107
Wales Block & Co. ... 44
Western Insulated Wire Co. ... 144
Westinghouse Electric Corp. (Lamp Div.) (Pittsburgh) ... 140, 149
Wheeler Reflector Co. ... 43, 51
Where To Buy ... 8
Wiremold Co., The ... 184
Wodack Electric Tool Corp. ... 93, 184
Youngstown Sheet & Tube Co. ... 22

SEARCHLIGHT SECTION

(Classified Advertising)

H. E. HILTY, Manager

EMPLOYMENT
Positions Vacant ... 185
EDUCATIONAL
Books ... 185
EQUIPMENT
(Used or Surplus New)
For Sale ... 185
WANTED
Equipment ... 185

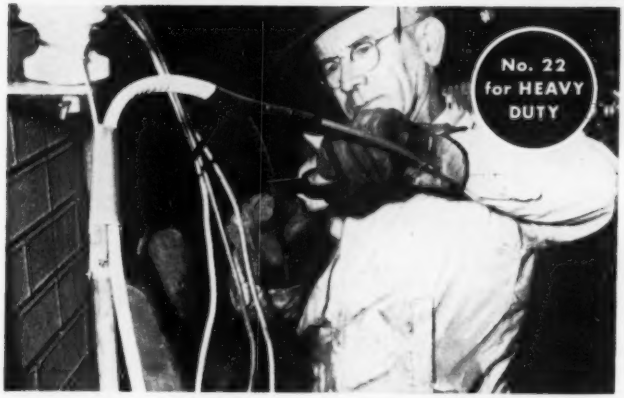
These manufacturers are making it easier for you to sell. Through the medium of advertising they sales-condition your best customers and prospects – *call regularly, arouse their interest* in and *create a strong preference* for the products you sell. By investing their time and money in useful advertising, they make your calls more productive . . . more profitable.

These manufacturers select ELECTRICAL CONSTRUCTION AND MAINTENANCE to reach and influence your best buyers because it is the preferred magazine in the field – paid for and read by more than 24,000 electrical contractors, industrial electrical men, motor service shop owners and consulting electrical engineers.

ELECTRICAL CONSTRUCTION AND MAINTENANCE

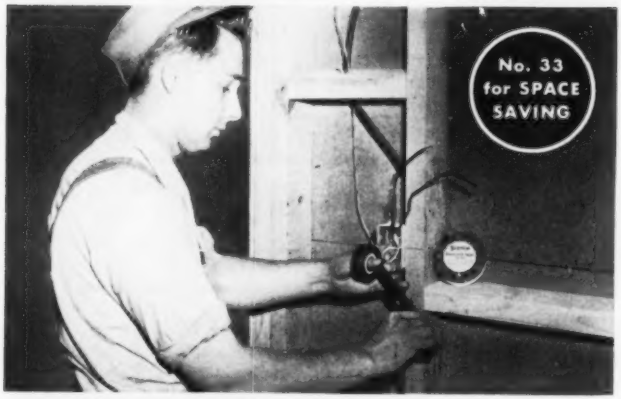
A McGraw-Hill Publication
330 West 42nd Street, New York 36, N. Y.

Sell more tape by selling the right tape!



. . . to utility companies

When heavy-duty protection is necessary on outdoor service lines, "Scotch" Electrical Tape No. 22 is the answer! Plastic backing is .010 inch thick for extra resistance to abrasion and weathering, yet this tape still gives neat, compact splices. Dielectric strength: over 10,000 volts. Utility companies report long insulation life, lowered costs.



. . . to electrical contractors

Old-fashioned insulating tapes are going "out the window" in favor of "Scotch" No. 33 Electrical Tape—the one tape that does the job of two! And the new "Job Size" rolls are a favorite! ¾ in. x 20 ft. packed 12 to a screw-top container. Stretchy plastic backing conforms snugly to odd shapes and contours. Dielectric strength: 10,000 volts. Order today!

. . . to appliance repair shops

Wiring repairs on electric grills, heaters, irons and similar "hot" appliances call for "Scotch" Electrical Tape No. 27. Glass cloth backing of this remarkable tape will not burn, and the thermosetting adhesive cures under high heat. Every repair shop's a customer!

3M COMPANY

SCOTCH BRAND ELECTRICAL TAPES

The term "Scotch" and the plaid design are registered trademarks for the more than 200 pressure-sensitive adhesive tapes made in U.S.A. by **Minnesota Mining & Mfg. Co., St. Paul 6, Minn.**—also makers of "Scotch" Sound Recording Tape, "Underseal" Rubberized Coating, "Scotchlite" Reflective Sheeting, "Safety-Walk" Non-slip Surfacing, "3M" Abrasives, "3M" Adhesives. General Export: 270 Park Avenue, New York 17, N. Y. In Canada: London, Ont., Can.

efficient fluorescent operation

long, trouble-free performance

full lamp life

rated light output

satisfactory overall lighting

...and there's a NEW reason for using

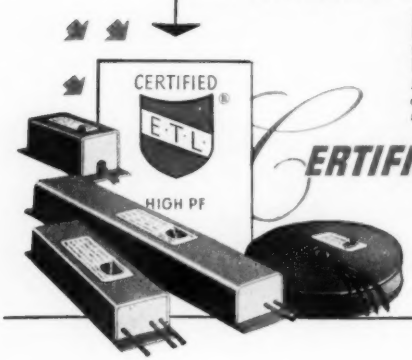
CERTIFIED BALLASTS

Conservation and efficient use of critical materials is now of vital importance to our national defense.

This adds a new reason for insisting on CERTIFIED BALLASTS in all fluorescent fixtures. For CERTIFIED BALLASTS always assure highest fluorescent efficiency and economy of operation.

CERTIFIED BALLASTS are tested by Electrical Testing Laboratories, Inc., which certifies they meet the precise specifications that assure efficient operation.

You can tell a ***CERTIFIED BALLAST*** *by the shield.*



• Complete information on the types of CERTIFIED BALLASTS available from each participating manufacturer may be obtained from Electrical Testing Laboratories, Inc., East End Avenue at 79th Street, New York, New York.

Participation in the CERTIFIED BALLAST program is open to any manufacturer who complies with the requirements of CERTIFIED BALLAST MANUFACTURERS.

CERTIFIED BALLAST MANUFACTURERS

Makers of Certified Ballasts for Fluorescent Lighting

2116 KEITH BLDG., CLEVELAND 15, OHIO

NEW LOW PRICES on Murray load centers mean High Volume–Fast Turnover!

Fully Magnetic!

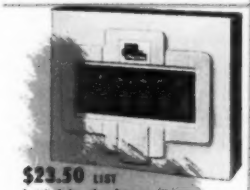
1. Breakers always carry the full load, regardless of temperature, they never need "derating."
2. Breakers trip instantly at 10 times rated current. This means a 15 Ampere breaker trips at 150 Amperes—carries all temporary overloads but trips instantly on short circuits and dangerous overloads.

Murray offers you load centers of the *highest quality* at prices *far below* your expectations. When you sell Murray Load Centers, your customers get maximum satisfaction at a low cost. Contractors, well acquainted with the high quality of Murray Load Centers, will be asking for them. In addition to the high quality of material and workmanship, you get load centers equipped with fully magnetic circuit breakers.

$8.25 LIST (with 2 breakers)
Cat. No. LB002. Two circuits, 40 Amp. Main.

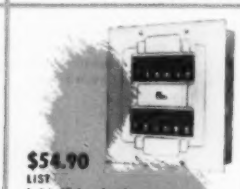
$11.55 LIST (with 2 breakers)
Cat. No. LC002. Two circuits, 55 Amp. Main.

$27.00 LIST (with 2 breakers)
Cat. No. LV211A. 100 Amp. Service Control Equipment



$23.50 LIST (with 6 breakers)
Cat. No. LD006. Six circuits, 70 Amp. Main.

$30.00 LIST (with 8 breakers)
Cat. No. LE008. Eight circuits, 70 Amp. Main.



$54.90 LIST (with 12 breakers)
Cat. No. LQ012. Twelve circuits. 100 Amp. Main.

$90.20 LIST (with 20 breakers)
Cat. No. LK120. Twenty circuits. 100 Amp. Main.

Murray®

Electrical contractors are being told about these new prices in current advertising. Be prepared. Call in a Murray representative and have him give you the details.

... All Murray Load Centers are listed by Underwriter's Laboratories, Inc.

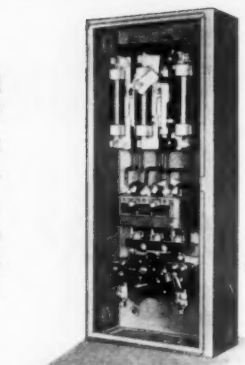
The Murray Load Center was given an Honorary Award for safety in the home by judges representing the National Safety Council, the American Designers Institute, and editors of leading home magazines (1951 Lewis & Conger Annual Home Safety Competition).

MURRAY MANUFACTURING CORPORATION
1250 Atlantic Avenue • Brooklyn 16, New York

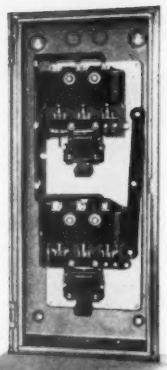
Service Entrance & Meter Equipment • Magnetic Circuit Breakers • Switches • Current Limiting Reactors • Crows'nest Aerial Ladders

CLEAR ACROSS THE BOARD . .

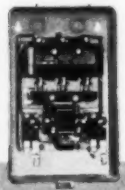
CLARK Type "CY" starters, sizes 2 and 3—employing the new principle of arc interruption—are offered in a wide range of models, for every application within their horsepower limits. A few of the many available are shown here. Enclosure styles include NEMA Types 1, 1A, 4, 5, 7 and 9.



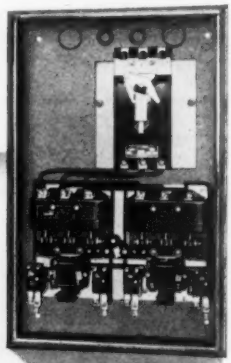
Bulletin 6018
Combination Non-Reversing
AC Magnetic Starter
with Fusible Disconnect Switch



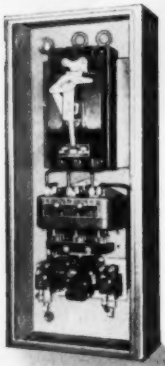
Bulletin 6031
Reversing
AC Magnetic Starter
without Overload Protection



Bulletin 6013
Non-Reversing
AC Magnetic Starter



Bulletin 6060
Combination Multi-Speed
AC Magnetic Starter
with Circuit Breaker



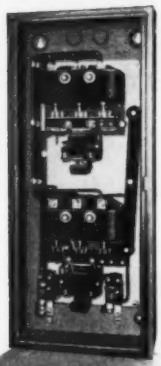
Bulletin 6020
Non-Reversing
AC Magnetic Starter
with Air Circuit Breaker

CLARK Type "CY" Sizes 2 & 3 —the starter with the revolutionary new arc-quenching principle.

The arc is extinguished by the effect of blow-out coils, *concentric with the contacts.* The steel arc chamber and center stud (colored blue in sketch at right) form the magnetic field which rotates the arc—either lengthening or confining it. Since the arc moves continuously on the contact surfaces, burning and pitting is minimized and contact life greatly increased.

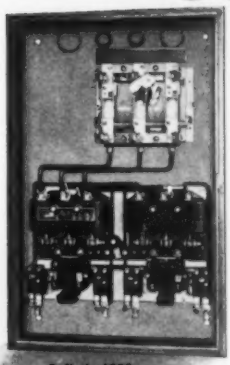
THE CLARK CONTROLLER CO.

. . CLARK Type "CY" AC MAGNETIC MOTOR STARTERS



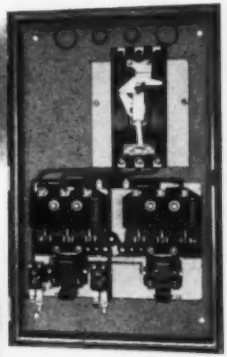
Bulletin 6030
Reversing AC
Magnetic Starter

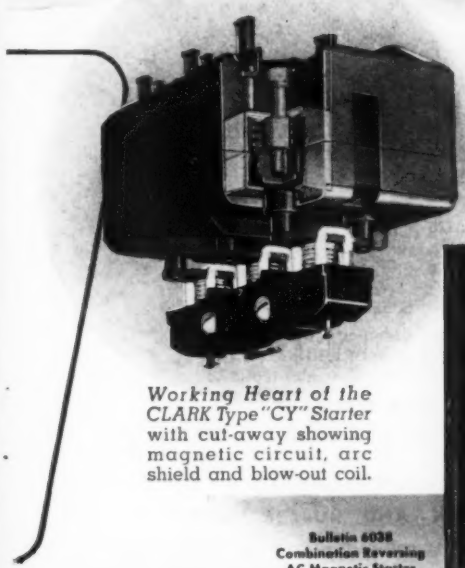
Every CLARK Type "CY" Starter gives you the extra protection of "Mill-Type" heavy-duty construction, *plus* the use of strong multi-turn magnetic blowouts in sizes 2 and 3, *plus* twin-break contacts of special silver alloy, *plus* advanced design with many exclusive features to improve efficiency and reduce maintenance.



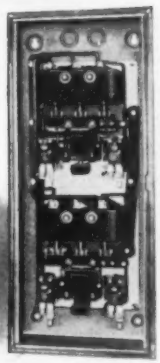
Bulletin 6058
Combination Multi-Speed
Magnetic Starter with
Safety Switch

Bulletin 6040
Combination Reversing
AC Magnetic Starter
with Air Circuit Breaker

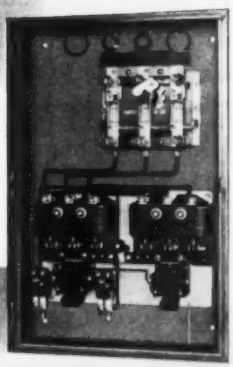




Working Heart of the CLARK Type "CY" Starter with cut-away showing magnetic circuit, arc shield and blow-out coil.



Bulletin 6060
Multi-Speed AC
Magnetic Starter



Bulletin 6038
Combination Reversing
AC Magnetic Starter
with Disconnect Switch

You can improve your service to your customers and increase your own sales and profits by selling CLARK Type "CY" Starters. Write for details.

ENGINEERED ELECTRICAL CONTROL
1146 EAST 152ND ST., CLEVELAND 10, OHIO

"SKI-FLYING" FURTHER

THAN ANYONE BEFORE TAUNO LUIRO, A FINN, SET A NEW WORLD'S RECORD IN MARCH, 1951, AT OBERSTDORF, GERMANY, WITH A BREATHTAKING JUMP OF 456 FEET.

JENKINS

Gold Seal Tape

GOES FURTHER, TOO...

GUARANTEED FOOTAGE
You get full measure with every roll. Tapes up tight and snug to the last inch.

NO WASTE
All Gold Seal Friction Tape tears evenly, does not ravel, molds to uneven surfaces.

HIGH DIELECTRIC
Less Gold Seal Tape needed per job. No pinholes; one tape thickness insulates.

LASTING "TACK"
Gold Seal sticks to the job under toughest conditions of cold and moisture.

EASY HANDLING
Gold Seal does not peel, dry out or smear the hands in hottest weather.

SPEEDS THE JOB
Linemen and electricians prefer Gold Seal Tape. It saves time and trouble.

STOCK AND SELL GOLD SEAL TAPE
for fast turnover — for steady profit.

FRICTION AND RUBBER TAPES
In either 10-roll cartons or single rolls. Every roll sealed in cellophane, stays fresh. Jenkins Bros., (Rubber Division), 100 Park Ave., New York 17.

Jenkins Bros. also make Diamond Seal Friction and Rubber Tapes which meet ASTM and Federal Specifications.

A PRODUCT OF JENKINS BROS. . . . MAKERS OF FAMOUS JENKINS VALVES

New! Improved!..

BLACKBURN *Pole Bottom* GROUND PLATE

REA Approved

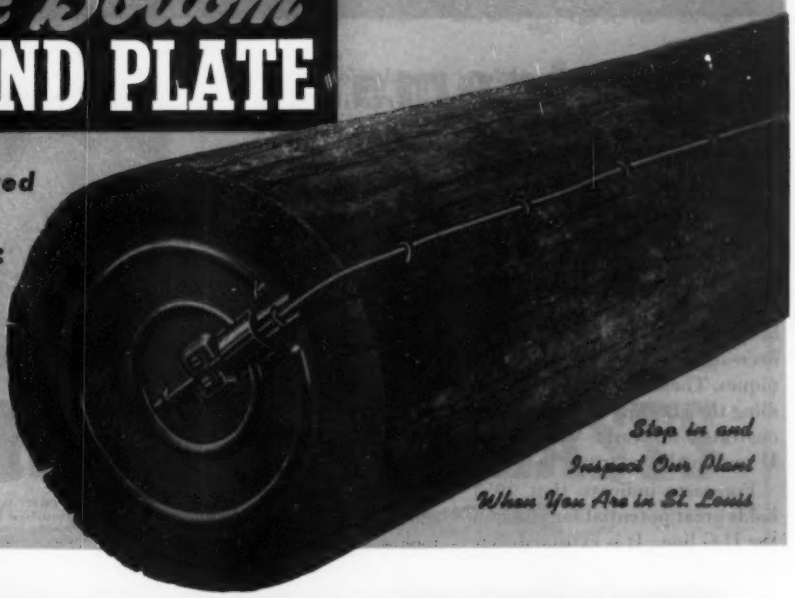
How to Order:

See your Jobber and specify BLACKBURN Pole Bottom Ground Plate.

Catalog Number GP-100
(Made in 1 size only)

Shipping Weight: 40 lbs. per 100

Patented



Stop in and Inspect Our Plant When You Are in St. Louis

3 BIG QUALITY FEATURES!

1. Supplied with double bar connector (one bar on each side of plate). These double bars grip wire tightly and positively—ground wire will not pull off or loosen as pole is set in hole.

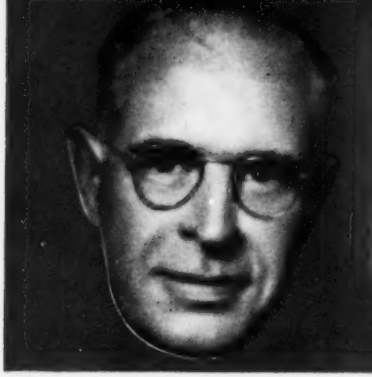
2. It's stronger—more rigid—easier to handle—easier to store—easier to install—send for sample and see for yourself!

3. Connector screws are made of high strength Duronze—will not season crack—can be installed tightly without stripping or distorting.

You get all these features and others too—at no additional cost—so specify BLACKBURN Pole Bottom GROUND PLATES!

SEND FOR A SAMPLE AND SEE FOR YOURSELF!

JASPER BLACKBURN CORP., 35 Madison St., St. Louis 6, Mo.
Phone CEntral 3007



Be it "guns" or "butter," you will continue to get ILG equipment

by P. D. Briggs, Vice-President and General Sales Manager, ILG Electric Ventilating Co.

FORTUNATELY for you and for us, regardless of whether our economy turns to "guns" or "butter" or a combination of the two, you may continue to build volume on ILG products.

Standard ILG equipment is needed as much in defense-crowded buildings as in peacetime. No changes are required in products . . . no changes are necessary in your selling techniques. These advantages of handling the ILG line were well demonstrated in World Wars I and II and in the intervals between.

Forecasts indicate that 1952 holds great potential for you and the ILG line. It is expected that total construction will run in the neighborhood of twenty-eight billion dollars, only a slight decrease from last year. Most of this new construction will be for industrial expansion, a market which needs great quantities of high quality ventilating and heating apparatus. Make a determined effort to book industrial orders with priority ratings, which are now available everywhere.

It is anticipated, also, that there will be in excess of six hundred thousand new home starts in 1952. Today's compact, air-tight defense housing, with kitchens in close proximity to living and bedrooms, has even greater need for electric ventilation to remove excess heat, "greasy grime," and stale cooking odors.

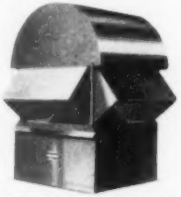
Speaking of housing, there has been considerable publicity recently on ways and means of removing dampness from basements and utility rooms. Field tests which we have conducted indicate that a small electric ventilator does a wonderful job of keeping basements dry. The fan showing greatest promise is the ILG "Package Type" which mounts easily in a basement window. Since the cost is surprisingly low, your dealers will find a ready market for this fan, particularly in homes equipped with automatic washers and driers.

For expert assistance on where and how you can tap these potentials and sell more ILG equipment, phone our nearby Branch Office or write us today.

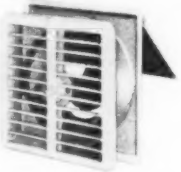
ILG
REG U S PAT OFF
VENTILATION

ILG ELECTRIC VENTILATING CO., 2822 N. Crawford Ave., Chicago 41, Ill.

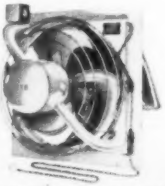
ILG SELF-COOLED MOTOR PROPELLER FANS—*extra*-powerful, *extra*-quiet, *extra* long life. Quick, easy to install in wall, window, or on roof (in penthouse with automatic shutter).



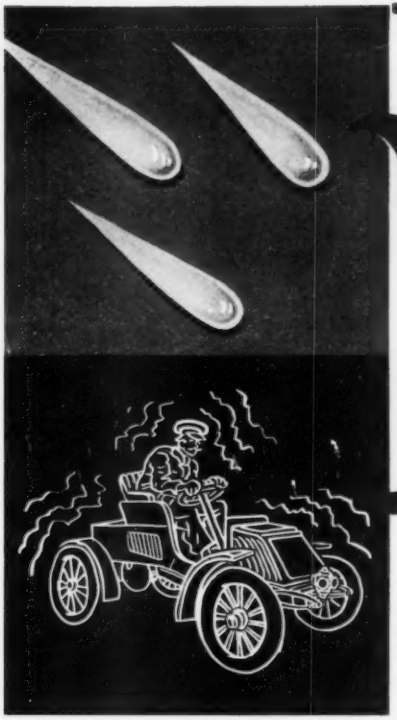
ILG "PRV" POWER ROOF VENTILATORS—new centrifugal fan type for vertical flues and duct systems. An instant hit—the "PRV" is now making new friends everywhere.



NEW ILG IC10 ELECTRIC VENTILATORS—feature-packed. Supremely quiet. Full rated capacity. For kitchens, bathrooms, laundry or recreation rooms . . . offices, small spaces.



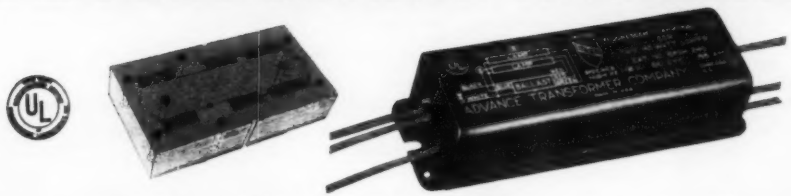
"PACKAGE TYPE" ELECTRIC VENTILATOR permanently installs in steel sash or other small panel window to remove excess moisture, heat, steam, and bad air from basements, utility rooms.



MOISTURE and VIBRATION

2 Dangerous Elements *Eliminated* in ADVANCE

FLUORESCENT BALLASTS



CERTIFIED ETL

by ADVANCE *"Double Protection"* METHOD

1. *Riveted in 8 places to insure against vibration.*
2. *Doubly protected against moisture by "vacuum impregnation."*

ADVANCE TRANSFORMER CO.

The Best Ballast Buy

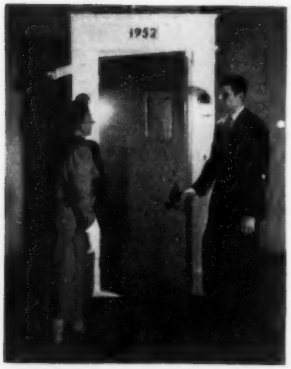
CABLE ADDRESS: ADTRANS

1122 W. CATALPA AVE., CHICAGO 40, ILL., U. S. A.

Hundreds of Home Builders See . . .

. . . LIGHTING RECIPES

CLOSE-UP of the light conditioned living-dining room that the home builders saw.



HOME BUILDERS learned that correctly placed porch and door lights, and illuminated house numbers are safety features that help sell houses.

CHICAGO—Home light conditioning can and should be the next great step in the progress of the American building industry. So were informed delegates to the annual convention of the National Association of Home Builders, recently held here.

They turned out in the hundreds to see General Electric's presentation, entitled "See Your Houses in a New Light," which was part of the convention program. The show emphasized the importance of adequate home lighting to builder and purchaser.

Achieving dramatic emphasis through the medium of skits, the presentation involved the use of a complete living-dining area and 12 other full-scale room segments, showing approved lighting for each area of the home.

G.E.'S GUESTS were shown how projector spot or flood lights can be used to illuminate driveways, or yard areas for longer hours of fun outdoors.

MORE THAN IMPROVEMENTS

IT TOOK A RADICAL ADVANCE IN BASIC CONTACTOR DESIGN
TO MAKE POSSIBLE ALL THESE IMPORTANT FEATURES

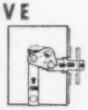
IN THE ARROW AH HART "CRA" TYPE

MAGNETIC CONTACTOR

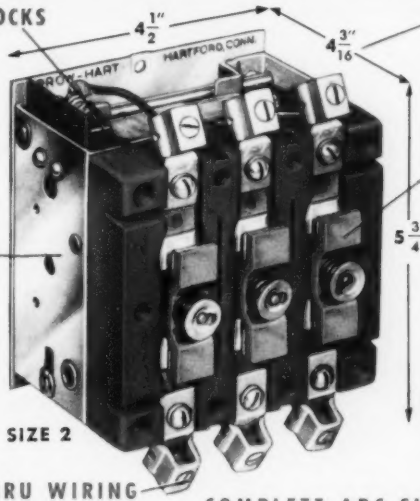
ELECTRICAL INTERLOCKS

Various combinations of these auxiliary switches can be installed without increasing overall contactor size. They provide extremely flexible circuit control and make easy the arrangement of every sort of interlocking devices.

EXCLUSIVE "RA" MECHANISM



This first *real advance* in contactor design in over 20 years accounts for many of the "CRA" plus features. Working thru a bell-crank fulcrum, a much smaller magnet easily outperforms old direct acting types.



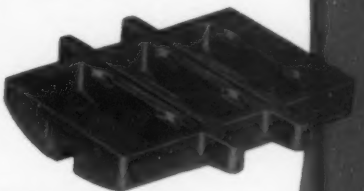
SIZE 2

HALF THE SIZE

Reduced control size is the answer to today's demand for increased power in limited space. Here is new design freedom, new compactness for panel-boards and other centralized control installations.

RUGGED CONTACTS

Special silver alloy tips withstand severe punishment. Horizontal closing action eliminates wasteful lifting against gravity; guided travel assures positive alignment. Vertical operating position prevents accumulation of breakdown materials.



STRAIGHT-THRU WIRING

This *in-built feature* — NOT just a bus-bar hook-up — makes possible space, time and work savings up to 30%. Looping and U-bending are eliminated; circuit identification is immediate and positive.

COMPLETE ARC SUPPRESSION

Molded alkyd base and hood have phenomenally high arc and tracking resistance. Tongue-and-groove construction completely isolates individual arcing chambers. In the Size 4, individual high heat and arc resistant chutes and baffle plates are provided.

BUILT-IN DEPENDABILITY

Because complex automatic sequence operations, vital safety devices and a host of other important electrical applications depend on contactors for their proper functioning, no detail of design, material or careful manufacture that can contribute to the reliability of Arrow-Hart Contactors is overlooked.

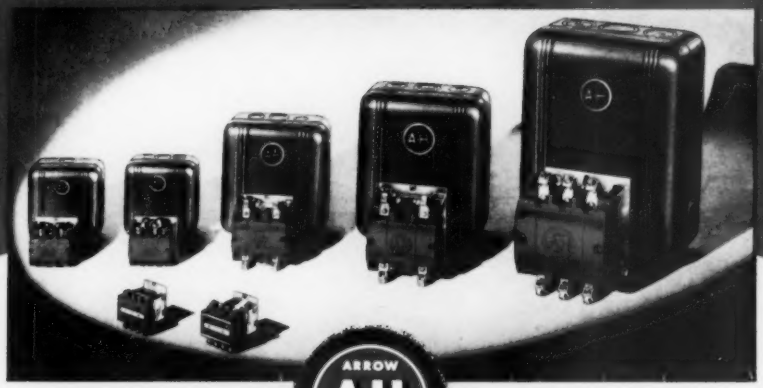
THE MOST ADVANCED CONTACTOR ON THE MARKET

ARROW AH HART

BUY WITH CONFIDENCE • PROFIT BY PERFORMANCE

THE ARROW-HART & HEGEMAN ELECTRIC CO., HARTFORD 6, CONN., U.S.A.

THE ONLY ANSWER TO ALL YOUR CIRCUIT CONTROL REQUIREMENTS



THE COMPLETE LINE OF ARROW AH HART "CRA" MAGNETIC CONTACTORS

- **ALL SIZES** 00 thru 4, ½ to 100 H.P., 10 to 150 Amps.
- **REGULAR AND REVERSING MODELS** — In all sizes.
- **A FULL LINE OF ENCLOSURES** — General Purpose NEMA Type 1, Explosionproof, NEMA Type VII, Weatherproof NEMA Type IV, Explosive Dust NEMA Type IX, Dust Proof NEMA Type V.
- **FOR ANY TYPE OF CONTROL**

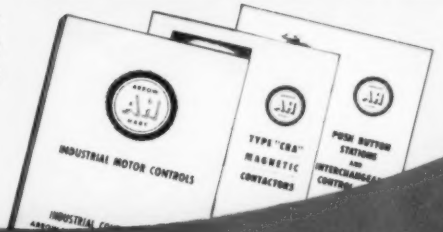
Arrow-Hart "CRA" Contactors can be controlled by a variety of manual or automatic switches and instruments, locally or from one or several remote positions. Both 2- and 3-wire control circuits are commonly used. The former, providing under voltage release, is preferable where automatic restarting with restoration of power is advantageous. 3-wire control utilizing a holding circuit provides under voltage protection. This system which requires manual restarting after current failure prevents sudden unscheduled starting with possible danger to operator or machinery.

"CRA" SELECTOR GUIDE

"CRA" Unit	Poles	Auxiliary Holding Switch	Extra Auxiliary Switches	Amperes Per Circuit		Maximum H.P. Ratings			
				Without Encl.	With Encl.	110V	220V	440-550V	
SIZE 00	1 - S, Convertible N.O. or N.C.	None	No	10	9	½ ¾	¾ 1	— 1	Single phase Poly-phase
SIZE 0	2 - S, all N.O. or one N.C.	Optional	Yes	15	13.5	1 1½	1½ 2	1½ 2	Single phase Poly-phase
SIZE 1	2 - S, N.O.	Optional	Yes	25	22.5	1½ 3	3 5	5 7½	Single phase Poly-phase
SIZE 2	2 - S, N.O.	Yes	Yes	50	45	3 7½	7½ 15	10 25	Single phase Poly-phase
SIZE 3	2 - S, N.O.	Yes	Yes	100	90	7½ 15	15 30	25 50	Single phase Poly-phase
SIZE 4	2 - S, N.O.	Yes	Yes	150	135	—	50	100	Poly-phase

SEND FOR MORE INFORMATION ABOUT

"CRA" CONTACTORS and about the complete Arrow-Hart Motor Control Line. There is an A-H unit for every circuit requirement including: "RA" Starters, Push Button Stations, Manual Starters, Fractional Horsepower Starting Switches and Push-Pull Selector Switches.



THE ARROW-HART & HEGEMAN ELECTRIC CO.
HARTFORD 6, CONNECTICUT

I'd like to know more about: ☐ "CRA" CONTACTORS
☐ TYPE "RA" MAGNETIC STARTERS ☐ The following additional controls: _____

NAME _____
POSITION _____
CO. NAME _____
CO. ADDRESS _____
CITY _____ ZONE ____ STATE ____

Printed in U.S.A.

INDUSTRIAL CONTROL DIVISION
THE ARROW-HART & HEGEMAN ELECTRIC CO.

Branches in: ATLANTA, BOSTON, BUFFALO, CHARLOTTE, CHICAGO, CINCINNATI, CLEVELAND, COLUMBUS, O., DALLAS, DENVER, DETROIT, INDIANAPOLIS, KANSAS CITY, LOS ANGELES, MILWAUKEE, MINNEAPOLIS, NEW YORK, PHILADELPHIA, PITTSBURGH, ST. LOUIS, SAN FRANCISCO, SEATTLE, SYRACUSE.

In Canada: Arrow-Hart & Hegeman (Canada) Ltd., Mt. Dennis, Toronto.

Packaged Light and Sound Conditioning

A TWO-IN-ONE package of illumination and sound conditioning has been developed by Curtis Lighting, Inc., Chicago.

This new Curtis double-duty installation does away with conventional spotting of luminaires—a process, although designed to obtain the best possible level of illumination, often resulting in a forest of uncomfortable brightness sources. Instead, Curtis uses bare lamps stretched 96 inches across and shielded by vertical baffle hangers that serve as glare and noise suppressors.

The new lighting system was recently tested in a schoolroom. Results to date indicate that its use, in some instances, can be successfully adapted to commercial and industrial applications as well.

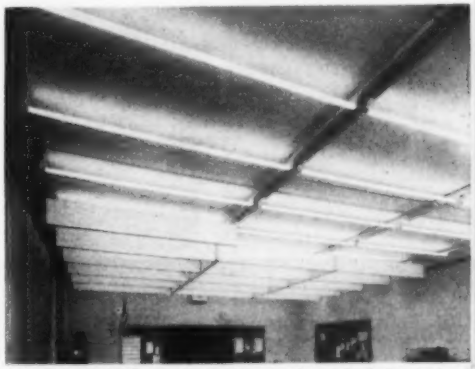
• **Installation Procedure**—Here's how the installation is set up. Several luminaire sections, 96 inches apart, are mounted either end-to-end or side-by-side, depending upon the room size and proportions. A typical luminaire section consists of three parallel sections of channel, interconnected by four lengths of ½-inch tubing and supporting baffles. The central channel is the larger size, enclosing the ballasts. The tubing sections require no threading and are secured by a turn of the fittings at the channel sides. These sections of tubing establish lampholder spacing, provide closed passage for wiring and unify the assembly for electrical grounding. The 1-foot by 8-foot baffles consist of panels of acoustical material set in a metal frame. Both exposed surfaces of the acoustical material are perforated for light and sound conditioning.

The ballasts, used in the standard luminaire sections, operate the bare lamps at approximately half brightness. The luminaire sections are factory wired so that all lamps on the window side may be placed on one switch circuit and the remaining lamps on another switch circuit or circuits. The lamps are 96 inches, T-12 Slimline-type, with single pin base and require no starters. The lamps are mounted between the wire channels like rungs in a ladder. The ballasts and the high-voltage wiring are confined to the larger central channel.

• **Laboratory Test Results**—In the schoolroom laboratory, the acoustical panels, running crosswise of the room, provided shielding for the pupils of 45 degrees and for the teacher 30 degrees. The shielding angles are measured downward from a horizontal plane through the lamps. These same panels could easily be shifted to a point midway between the lamps, in which case, the shielding would be 35 to 40 degrees from both ends of the room. Beyond that, panels shield the light completely.

The quality of lighting over the desk area is comparable to that of indirect illumination. According to Curtis engineers, the brightness of the upper part of the room from normal viewing angles is much lower than it would be with conventional overall luminous ceiling if such an installation were to provide an equal quantity of light on the desks. At each end of the room, there are two rows of low brightness lamps on four-inch centers. These provide higher illumination on the chalkboard and rear wall and assist in keeping the level of illumination at the front and rear desks comparable to that at the center.

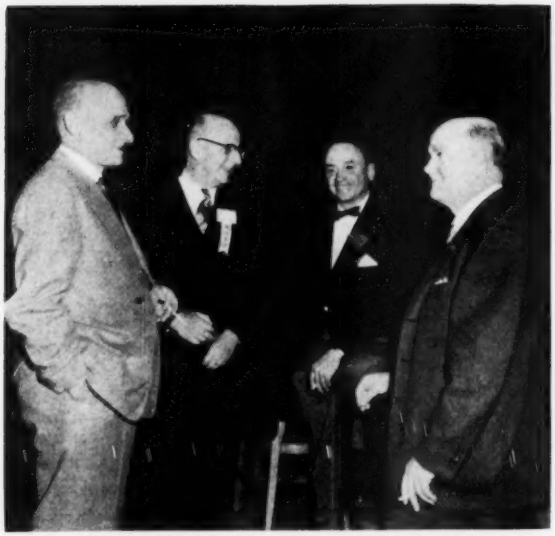
SKELETON ASSEMBLY is fastened to ceiling. Central channel is the larger size, enclosing the ballasts. Tubing sections require no threading, are secured by a turn of the fittings at channel sides



LIGHT-SHIELDING, sound-absorbing panels are hooked onto hangers from the channel sections and form an egg-crate pattern providing shielding for the pupils of 45°, and for the teacher 30°.

COMPLETE INSTALLATION shows how bare lamps are completely framed, resulting in uniform, shadowless light throughout the room —plus, the added feature of sound conditioning.

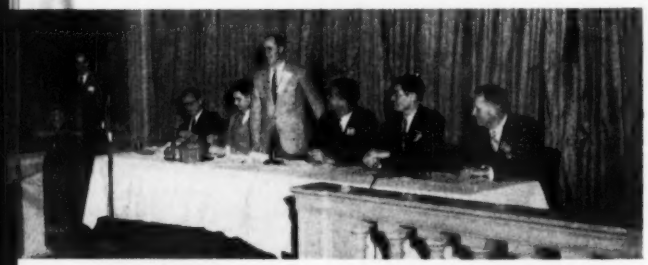
O. Fred. Rost (left), vice president of Appleton Electric Co., Chicago, and **C. W. Moseley,** vice president of R. H. Bouligny, Inc., of Charlotte, N. C.



NEWLY-ELECTED PRESIDENT of the Southeastern Electrical Wholesalers Assn., J. B. Carson (second from left), president of Kingsport Electric Co., Inc., Kingsport, Tenn., chats informally with three representatives of Benjamin Electric Mfg. Co. at second annual Industry Day meeting held recently in Atlanta. Other members of group (left to right) are Ray Corwin, New York; J. H. Fall, Des Plaines, Ill; and Birch Addington, Atlanta, Ga.

Wholesalers and

Ned H. Morgan, Florida Electric Supply, Inc., Miami; **B. A. Bryant,** Atlanta, L. Morris Landers Co.; **Graham Dowling,** Tampa, J. A. Lloyd Co.; **R. H. Hanson,** Atlanta, Cutler-Hammer, Inc.



INDUSTRY PANEL was one of main features of meeting, and included (left to right) John S. Bell, moderator, Carl S. Menger, R. C. Wilson, J. M. Passailaigue, H. L. Wilson, John C. Bolen and O. V. Scott. Viewpoints of electrical manufacturers, wholesalers and contractors were heard.

SEWA OFFICERS and guests at breakfast meeting are (left to right) Treasurer F. H. Dendy, Sr., Vice President Paul Ramsey, President J. B. Carson, Retiring President J. J. Perry, Arthur W. Hooper, editor, ELECTRICAL WHOLESALING, Carl W. Evans, editor, Electrical South, Secretary-Managing Director M. L. Tice.

SEWA Sees

By E. Dalton White
Chief, Atlanta News Bureau

A BRIGHT future with expanding markets and larger sales was the forecast for the electrical supply industry at the second annual Industry Day meeting held recently in Atlanta by the Southeastern Electrical Wholesalers Assn., Inc.

Spotty conditions in some areas were predicted as the defense program moves ahead. But with high national income and increased savings, little indication was seen by speakers and

J. T. Cobb, Atlanta, Diamond Expansion Bolt Co.; **B. L. McGowan,** McGowan Electric Supply, Tallahassee; **L. C. Rader,** Atlanta, H. C. Biglin Co.; **F. P. Larson,** Central Electric Supply, Hickory, N. C., (left to right).

Louis G. Sullivan, Sullivan Hardware Co., Anderson, S. C.; **C. S. Roach,** Atlanta, General Cable Corp.; **Alvin H. Phillips,** Sullivan Hardware; **Richard H. Osgood,** General Cable (shown left to right).

Manufacturers Chat between Sessions at Atlanta Meeting

W. H. Butt (left), president of Butt's Electric Supply Co., Charleston, S. C., and **W. V. Rountree,** of Walker Brothers, Charlotte, N. C.

H. F. Burnette, of the Electrical Equipment Co., Augusta, Ga.; **Paul Jeans,** Atlanta, of Sylvania Electric Products Inc., and **Pat Byrnes,** Walker Electrical Co., Atlanta.

Ben S. Weil, Mayer Electrical Supply, Birmingham; **E. K. Moore,** Bridgeport; **H. W. Shropshire,** Atlanta, Harvey Hubbell, Inc.

Few Clouds on Sales Horizon

members at the meeting that the nation will witness a deep downtrend in industrial activity.

• **Discuss Problems**—The two-day Atlanta meeting, attended by more than 300 persons and held at the Biltmore Hotel, was jampacked with discussions of the problems facing electrical wholesalers, contractors and manufacturers. Representatives from other sections of the country were present in addition to the delegates from the southeastern states.

Those from the region, as well as those from distant points, expressed approval of the rapid growth of industry in the South. Its establishment as an important part of the national economy was generally expressed throughout the meeting. The consensus was that industry in the South is moving in the right direction and at a fast and impressive clip.

• **Carson Elected**—During the closed session held by the SEWA members, J. B. Carson, Kingsport Electric Co., Kingsport, Tenn., was elected president. The former vice president, he succeeds J. J. Perry, of the Electric Supply Co., Atlanta. Paul Ramsey, Ramsey Electric Supply Co., Chattanooga, was named vice president. Fred H. Dendy, Sr., Electrical Wholesalers, Inc., Atlanta, was named treasurer. Re-elected secretary and managing director was M. L. Tice, who organized the fast-moving meeting this year.

• **Name 7 to Board**—Named to the board of governors were Cecil J. Matthews, of Matthews Electric Supply Co., Birmingham; B. Lomax McGowan, McGowan Electric Supply Co., Tallahassee; James E. Thompson, Thompson-Wilson Co., Atlanta; John Shealy, Shealy Electrical Wholesalers, Greenville, S. C.; B. F. Buchan, Southern States Supply Co., Charlotte, N. C.; H. D. Roden, Roden Electric Supply

H. L. Wilson, Thompson-Wilson Co., Atlanta; **Pat Byrnes,** Walker Electrical Co., Atlanta; **R. G. Morris** and **D. J. Baker,** both of Morris-Johnson Electric Supply Corp., Savannah, Ga. (shown left to right).

Arnold Geeslin (left) of Townsend Electric Supply Co., of Albany, Ga., and Townsend Electric President **C. Q. Townsend**

Wholesalers Chat with Wholesalers

Co., Knoxville, Tenn.; and Milton O. Hollis, Raybro Electric Supplies, Inc., Tampa, who was named governor at large.

The keynote address at the meeting (ELECTRICAL WHOLESALING, Feb., 1952, p. 58) was made by O. Fred. Rost, vice president of Appleton Electric Co., Chicago. Because business has been abnormal since 1940, Mr. Rost warned those attending the meeting that they should make a careful analysis of internal, as well as external, business affairs. Every effort should be made, he said, to improve operating efficiency, analyze sales and their future potentials, markets in the area, and size of inventory in relation to investment and turnover.

A good business year for 1952 was forecast by F. W. Mansfield, director of sales research for Sylvania Electric Products Inc., who said the industry is assured of a good replacement market on many items. Luxury items, he declared, will always sell fast in times of expanded national income. In addition, he expected residential construction in 1952 to remain high.

J. I. Brockman, Brockman Electric Supply, Sarasota, Fla., **Manuel Goldstein,** Jax Electric Supply, Jacksonville.

• **Research a Tool**—The Sylvania sales research director said market research is not a panacea, but is a helpful tool in determining sales policies and aids in solving day-to-day problems.

The TV market, the speaker asserted, has been and is further correcting its inventory problem. The industry is now back to a healthy position, he said, but warned that further government restrictions could create a tighter TV market during the year.

In discussing the problems of industry cooperation, C. W. Moseley, vice president of R. H. Bouligny, Inc., Charlotte, said there must be mutual interest in all dealings to insure continued success of the businessman.

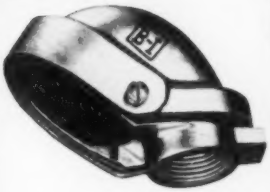
Mr. Moseley cautioned his listeners against submitting bids on materials before obtaining firm prices. He said the practice of bidding on a job and then attempting to obtain materials at less than quoted prices is risky.

• **Various Viewpoints Heard**—The highlight of the closing session was an industry panel discussion. Presenting the electrical manufacturers' viewpoints were Carl S. Menger, vice president of Triangle Conduit & Cable Co., New Brunswick, N. J., and R. C. Wilson, product planning manager of Trumbull Electric, department of General Electric Co., Plainville, Conn. Those presenting the electrical wholesalers' viewpoints were J. M. Passsailaigue, of P. & W. Electric Supply Co., Columbus, Ga., and H. L. Wilson, Thompson-Wilson Co., Atlanta. The electrical contractors' viewpoints were presented by John C. Bolen, Electrical Contracting & Engineering Co., Charlotte, and O. V. Scott, Scott Electric, Atlanta. The moderator was John Sammons Bell, of Atlanta.

J. J. PERRY, retiring SEWA president, welcomes delegates to the second Industry Day meeting at Atlanta.

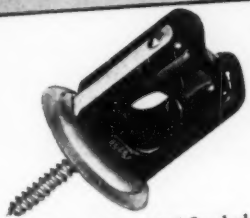
F. W. MANSFIELD, director of sales research for Sylvania Electric Products Inc., was one of featured speakers.

Blackhawk No. 600 Watertite connectors for service entrance cable. Smooth, non-rusting casting with live rubber grommet for lasting protection. Clean, easy running threads and tapered point screws for faster installation.



Blackhawk No. 1426 Conduit entrance caps. Special high strength non-corrosive aluminum alloy. Easy and positive to position. Filister head cap holding screws. Threads clean and full cut. For 2, 3, 4, or 5 wire service.

Blackhawk No. 711 Service entrance cable heads. Cast alloy body with separate cover. Heavy steel cable clamp. Large keyhole mounting for easy attachment to building.



Blackhawk No. 3626 Steel clad wire holders. Heavy steel base and supporting strap, No. 22 square shoulder screw. All parts hot dip galvanized. Porcelain has compression strain only. Smooth rounded surfaces protect wire insulation. REA approved.

TOPS FOR QUALITY AND PROFIT

(Patent Pending)

Blackhawk Snap-Straps "The strap with the bump!" Exclusive self-holding feature saves time, eliminates fumbling and dropping, makes difficult installations easier. Wide range of sizes for rigid and thinwall conduit.

Blackhawk Industries

FITTINGS AND FIXTURES

Electrical wholesalers everywhere have found they can recommend with confidence and sell with profit the B-I Line. Every item is uniform top quality, with features for easier and faster installation and long service life. You can stake your reputation on Blackhawk. Once your customers try B-I they'll be back for more.

Write for Free Catalog

IMMEDIATE DELIVERY FROM ADEQUATE STOCKS TO ELECTRICAL WHOLESALERS ONLY

WHEN YOU BUY ASK FOR B-I

BLACKHAWK INDUSTRIES, DUBUQUE, IOWA

Entrance Cable Fittings . Staples . Yard Lights . Sill Plates . Locknuts and Bushings . Wire Holders Fluorescent Brackets . Cable and Conduit Straps . Connectors . Box Supports . Conduit Entrance Caps . Grounding Assemblies.

NOW G-E T-47 Time Switch Has New Low Price and Guarantee

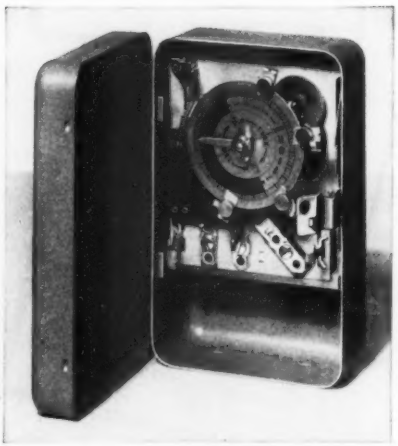
PRICE LOWERED TO $11.50*. Now you can offer the best service and a new low price where your time switch business is concerned. The General Electric T-47 is now easier to sell than ever before. The 15 per cent price reduction makes it possible for your customers to save more money on each installation. Mr. F. C. Sweeney, of the Graybar Electric Co., Inc., Albany, New York, says that "the new cost assures me, aside from my regular profit, additional customer satisfaction in the dependability and prestige of General Electric."

NEW GUARANTEE. If your customer's T-47 time switch becomes inoperative or damaged within 18 months of date of manufacture, he can get an exchange at no charge. And he doesn't have to wait a long time. The new G-E recommended stock plan enables you to give your customer over-the-counter service.

T-47 EFFICIENCY. This time switch handles one or two on-off operations every 24 hours. Like all G-E time switches, the T-47 gives you easy adjustment, simple installation, and rugged construction.

FOR ANY INSTALLATION that requires accurate, repetitive timing, you'll find a G-E time switch tailored to do the job. Order today from your local apparatus office. For more complete information on the T-47, write for Bulletin GEC-578, Section 603-117, General Electric, Schenectady 5, N. Y.

*Manufacturer's suggested retail price.



TYPE T-47 TIME SWITCH

GENERAL ELECTRIC

603-117

Fair Traders May Cinch Bill This Year

- **Two House committees in close battle to get some sort of fair trade legislation on the books**
- **But future action by the Senate is uncertain, with the possibility of a Truman veto always a threat**

WASHINGTON — Prospects for enactment of a fair trade bill are improving. Rival trade associations are trying to patch up differences and come up with a compromise bill. But getting a fair trade law on the books this year still isn't a sure thing, according to the McGraw-Hill Washington Bureau.

Rivalry between the National Assn. of Retail Druggists and the American Fair Trade Council has split the legislative drive into two prongs, resulting in simultaneous hearings before the House Interstate and Foreign Commerce Committee and the House Judiciary Committee. Both trade groups are backing similar bills that would put fair trade back on its feet by making retail price maintenance contracts binding on non-signers.

• **Both Would Do It**—The NARD-backed McGuire bill OK'd by the Priest subcommittee of the House Interstate Committee would do it by amending the Federal Trade Commission Act. The AFTC-supported Keogh bill before the Celler subcommittee of the House Judiciary Committee would do it by amending the Sherman Act.

The Supreme Court decision in the Schwegmann case last May rendered fair trade laws in 45 states ineffective by ruling that the Miller-Tydings amendment to the Sherman Act did not bind non-signers to observe price maintenance contracts between manufacturers and retailers. The decision touched off a wave of price-cutting by large stores in a number of cities.

• **Testimony the Same**—The simultaneous hearings have resulted in witnesses giving duplicate testimony before each subcommittee. Officials from the Antitrust Division of the Justice Department and the Federal Trade Commission, for instance, spent a day each before each subcommittee reading identical statements and answering almost the same questions.

This bred a rivalry that threatened a legislative standoff. NARD and AFTC decided it was time to try to get together on a bill before the whole legislative effort bogged down in intercommittee rivalry. So far, the two groups haven't been able to work out a substitute bill that suits both sides.

Both the Antitrust Division and FTC contend that existing laws—the Sherman Act, Federal Trade Commission Act and the Robinson-Patman Act—provide sufficient legal weapons to level at price-cutters and granters of discriminatory price discounts. The proposed fair trade laws, they contend, would go further than necessary to correct these abuses and would in effect put a floor under retail profits through increased profit margins.

• **Both Oppose Bills**—Both FTC and the Antitrust Division oppose the four pending fair trade bills, but support the Curtis bill which would repeal the Miller-Tydings Act altogether.

The Priest subcommittee approved a revised edition of the McGuire bill February 27. It heard chiefly proponents, headed by NARD, and including trade groups representing jewelers,

HARDWORKING Residential Lighting Committee of the National Assn. of Electrical Distributors gathers around Charles G. Pyle, executive director of NAED; J. I. Bogdan, of the B. & B. Electric Co., Cincinnati, chairman of NAED's Residential Lighting Committee; and Alfred Byers, NAED's executive secretary, seated left to right at table. The group met recently at Conrad Hilton Hotel, Chicago, to plan programs and activities for the coming year. Attending were, left to right standing, S. R. Shemitz, New Haven Electric Supply, Inc., New Haven, Conn.; W. C. Pirie, NAED public relations manager; Frank Argast, Farrell-Argast Electric Co., Indianapolis; C. D. Snyder, Weatherbee-Snyder Electric Co., Oklahoma City; C. C. Vail, United Electric Supply Co., St. Louis; H. J. Fullerton, Fullerton Electric Supply Co., Muskogee, Okla.; Phillip B. Leff, The H. Leff Electric Co., Cleveland; R. E. Furbay, The Furbay Electric Supply Co., Canton, Ohio; Martin Levine, MarLe Co., Stamford, Conn.; Charles Snakard, Graybar Electric Co., Chicago; Stanley Hoffman, The Hoffman Electric Supply Co., Baltimore; Philip E. Brecher, The Brecher Co., Louisville; E. F. Anixter, Englewood Electric Supply Co., Chicago, and L. H. Gross, of Gross Electric Supply Co., Houston, Texas.

out in front . . .

with Revere ELECTRIC MFG. CO. CHICAGO U.S.A.

LUMINAIRES *for*

Incandescent Lamps or 400 Watt Mercury Vapor Lamps

Top or side mounting with necessary fittings.

Stock these outstanding Revere Luminaires and be prepared for your share of this new trend in store front illumination.

No. 2313-A and No. 2354
Type III Distribution.

No. 2303-A and No. 2355
Type IV Distribution.

No. 2251 Endoval Luminaire for 400 watt Mercury-Vapor Lamps.

REVERE ELECTRIC MANUFACTURING CO.
6011 BROADWAY • CHICAGO 40, ILL.

The Greatest Name in Lighting • Street • Airport • Service Station • Sports • Industrial

pharmacists, hardware merchants and sundry small businessmen. It had invited several fair trade opponents, such as Macy's Department Store, but most of them declined to appear.

Meanwhile, the Celler subcommittee had witnesses scheduled through the middle of March. These include Macy's, Klein's of New York, Schwegmann, and several consumer groups.

• **Bill's Fate Uncertain**—Members of the Priest subcommittee are claiming enough votes to pass their bill in the House. They're counting on election-year vulnerability pressuring to get a favorable vote. Fate of a House-passed bill in the Senate is uncertain. The Senate, only a third of which would be up for re-election, is much less susceptible to pressure. And a Truman veto still is a threat for any bill that gets through Congress.

New Firm Name Announced

HUNTINGTON PARK, CALIF.—J-Z Wholesale Electric Co., 2665 East Slauson Ave., this place, has changed its name to the Argo Electric Supply Co.

Oldest Thurow Distributors' Employe Retires in Florida

TAMPA, FLA.—C. C. Campbell, oldest employee of Thurow Distributors, Inc., of Tampa, Miami, Jacksonville, Orlando and Tallahassee, has retired after almost 18 years of continuous service with the firm, according to an announcement by Thurow president, H. M. Carpenter.

Mr. Campbell has been associated with Thurow since its opening in 1934, and now becomes Thurow's first retired, pensioned employee. He has spent most of his life in the parts supply business, and at one time or another covered most of Florida.

Purchase Electric Supply Is Sold in Grand Rapids

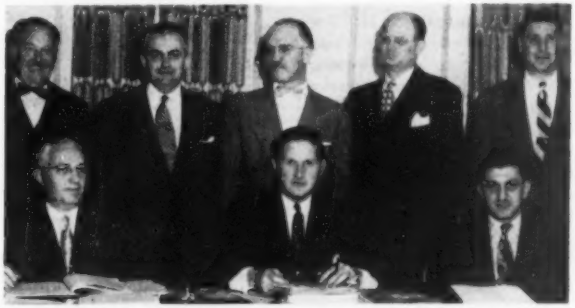
GRAND RAPIDS, MICH.—The Purchase Electric Supply Co. here has been sold after 40 years in the distribution business of electrical wiring, conduit and fixtures for industrial lighting. New owners of the firm are J. Walbert Gentry and James H. Cook, the new president and general manager and vice president in charge of sales, respectively.

The firm has some 5,000 square feet of warehouse and office space and

Seen on the Wholesaling Front

NEW DIRECTORS of Southeastern Electrical Wholesalers Assn. gather at Atlanta recently to plan activities for the coming year. Governors and officers making plans at the meeting were (standing, left to right) John S. Bell, counsel; M. L. Tice, secretary and managing director; Fred H. Dendy, Sr., treasurer; B. H. Bucan and James E. Thompson; and (seated) H. D. Roden; Paul Ramsey, vice president; J. B. Carson, president; J. J. Perry, retiring president; and B. Lomax McGowan.

J. TREVOR PEIRCE, vice president of Peirce-Phelps, Inc., Philadelphia distributor, receives the A. O. Smith Corp. award in behalf of his company for national sales championship honors for 1951. The award was made at a dinner at the A. O. Smith Kankakee, Ill., plant. Taking part in the presentation ceremonies (left to right) are W. W. Stake, A. O. Smith eastern district sales manager; F. S. Cornell, group executive, Smith Corp.; S. E. Wolkenheim, Smith water heater division marketing director; Mr. Peirce; and J. F. Donnelly, assistant manager of Kankakee works.



POTENTIALS FOR ELECTRIC HOUSEWARES in 1952 and ways to more efficiently cultivate this tremendous market were discussed by the Electric Housewares Committee of NAED at a recent meeting in Chicago. Attending were (seated, left to right) Alfred Byers, NAED executive secretary; Sam Fingrutd, Everybody's Supply, Philadelphia, chairman; Mervin Hirschfeld, Hirschfeld Electric Supply, New York; and (standing) E. M. Lacey, Wesco, Newark, N. J.; J. B. O'Neil, Masback, Inc., New York; J. I. Bogdan, B. & B. Electric, Cincinnati; J. R. West, Graybar Electric, New York; J. H. Beller, Beller Electric, Newark. Other members not shown are E. L. Milhender, Milhender Distributors, Boston; G. D. Miller, Dutton-Lainson, Hastings, Neb.; P. S. Nix, Orkil, Inc., Hartford; G. S. Steiner, Steiner Electric, Chicago.

is a distributor in the west Michigan and northern Indiana area.

In August, 1951, the Benton Harbor, Mich., branch of the firm was sold to the West Michigan Electric Supply Co. of that town.

Mr. Gentry is an electrical engineering graduate of Purdue University, and also did postgraduate work in business administration at Purdue. Mr. Cook is an electrical engineering graduate from the University of Illinois, and was formerly associated with various electrical supply firms as a sales engineer.

Mr. and Mrs. Clark Mesler, former owners, have retained ownership of the firm's motor repair shop.

Construction Activity High During January Period

WASHINGTON—Construction activity continued at near-record levels in January. According to a report issued jointly by the Building Materials Division, U.S. Department of Commerce, and the U.S. Labor Department's Bureau of Labor Statistics, the total value of new construction put in place during January amounted to more than $2.1 billion, a 4 per cent decline from December and a slight rise above the January, 1951, total.

Increases in military, industrial and public utility construction maintained the level of construction outlays despite reductions in housing, commercial building, highway and some other types of construction. School building activity also was above a year ago in January.

Outlays for new private construction in January amounted to $1,460 million, off by 4 per cent from December and 8 per cent under the January, 1951, total. The value of residential building, estimated at $720 million, was 20 per cent below a year ago. The report, however, stated that the drop in home-building activity from 1950's record levels was halted by the middle of last year. Since that time, it has followed a seasonal pattern at a level around 20 per cent below 1950.

Industrial and most other types of private non-residential building advanced in January. Total expenditures for new public construction was estimated at $667 million in January, 31 per cent more than the January, 1951, total. Military construction was nearly six times the year ago volume, industrial and residential building were more than double and school building was up by 14 per cent from last year. Highway construction was about 20 per cent lower this January than last and the remaining types of public works were down moderately.

Thomas B. Schmid Named To Crescent Electric Post

DUBUQUE—Thomas B. Schmid has been appointed executive vice president of Crescent Electric Supply Co. The announcement was made by

(Continued on page 136)

Students See G.E. Re-enact Edison Invention at Nela Park

CLEVELAND — Thomas Edison's 105th birthday was celebrated here last month at Nela Park, headquarters of General Electric's Lamp Division, with the re-enactment of Edison's painstaking invention of the world's first practical electric light.

The re-enactment was staged by Ben F. Rudolph, veteran glass blower, who repeated the performance several times daily for high school science students from northern Ohio. Mr. Rudolph, now 81, retired on pension from G.E. Lamp Division in 1938 after nearly 50 years of continuous service devoted to lamp making, but returned temporarily to re-enact the Edison role.

The step-by-step demonstration by Mr. Rudolph took one hour, but he speeded up the complex process of making replica lamps by using prefabricated filaments, leading-in wires and wooden bases. Without these short cuts, manufacture of the replica lamps by hand methods would have consumed many hours. Because of the patience that is required to manufacture the lamps, Edison's early hand-blown lamps sold for more than a dollar and a half each.

In addition to the re-enactment of Edison's invention, which took place at the Lighting Institute, the students were shown highlights in the progress of modern lamp development; a life-size stage set showing a practical application of the "tree of light" in today's living room; visited the institute's new Lighting for Mobilization Center; saw lamp rainbows in a new light; saw a demonstration of light in the role of a detective in industry; and took their teacher's picture by means of flashtubes and Polaroid cameras.

WATCHING WITH RAPT ATTENTION, teacher and pupils see Ben F. Rudolph play the role of Edison as Dave Lothian explains each step in re-enactment of invention of world's first practical electric light. The demonstration was part of celebration commemorating the inventor's 105th birthday, and took place at General Electric's Lighting Institute, Nela Park.

The two-hour tours of the institute were made by nearly 2,500 students, from public, private and parochial schools. According to Henry J. Chanon, manager of the institute, this is the sixth such annual event.

NPA Amends M-86 and M-82

- **Distributors of copper wire mill products may sell up to 10% of "standard package" without ACM order**
- **Distributors of brass mill products permitted to sell quantities up to 25 lbs. without ACM order**

COPPER wire mill products distributors' Order M-86 has been amended to bring the regulation into fuller conformity with objectives of the Controlled Materials Plan.

The National Production Authority, through this amendment, has allowed distributors of copper wire mill products to sell materials from stock only on authorized controlled materials (ACM) orders. But, as an exception to this provision, the amended order permits distributors to sell up to 10 per cent of a "standard package" to any one customer without an ACM order.

• **Not Replaceable**—This provision is intended to permit the sale of broken lots and quantities of material not normally sold against ACM orders. It also assures continuance of established trade practices by distributors of copper wire mill products. Such sales, it was pointed out, are not replaceable on X-6 orders.

This amendment to M-86 spells out in detail the procedure to be followed by distributors when placing an order with mills for direct shipment to customers. Specifically, it provides that material may be received by a distributor at his warehouse, but may not be physically incorporated in his normal working stocks. Such material must be delivered in its entirety to the customer for which it is intended.

A new definition of copper wire mill products which conforms with the wording of CMP regulations and other NPA orders is also included in the new order.

• **Complete Harmony**—At the same time, the NPA amended its brass mill products distributors' Order M-82 in similar fashion. This amendment, says NPA, will bring that order into complete harmony with the "closed-end" Controlled Materials Plan.

The amendment provides that distributors of brass mill products may sell material from their stocks only to fill authorized controlled materials orders. A provision is retained in the order, however, which permits the sale of quantities weighing 25 pounds or less without demanding ACM orders from the purchaser. This allows for continuance of the established practice of selling odd lots and small quantities of brass mill products to small users. Like the amended copper wire mill order, this amendment states that such sales are not replaceable by distributors on X-6 orders.

The amendment also:

• Permits distributors of brass mill products to purchase from other distributors.

• Permits distributors to sell up to 10,000 pounds of condenser tubes from stock on any one ACM order without written approval from NPA. This amount is considered a conventional purchase of such material and the change eliminates paper work on the part of purchasers.

• Provides that a distributor who orders a direct shipment of brass mill products from the mill for a customer, may receive it at his warehouse for delivery to the customer, but must regard the material as earmarked for the customer and may not incorporate it into his inventory.

OPS Switches Price Rules

Manufacturers who perform certain installation and erection services in connection with the sale of equipment are to price such work under Ceiling Price Regulation 93 which covers construction and related services. This came about by amendment 30 to CPR 30.

Material and labor costs for machinery and industrial equipment installed or erected by the manufacturer at the buyer's plant vary greatly. Accordingly, OPS deems it proper that such installation and erection services hitherto covered by CPR 30 be priced under CPR 93 in the same manner as other contract construction.

CPR 30 will continue to cover installation or erection services which derive primarily from manufacturing skills and special operational problems of the equipment. In some cases, these are so closely related to the commodity that they are included in the commodity price which is quoted or listed on the basis of its sale installed. Accordingly, engineering and supervisory services furnished by the manufacturer in installing a commodity, and services included in the base period price in connection with the sale of a commodity on an installed basis, will continue to be covered by CPR 30. Where the engineering and supervisory services are part of the contract, the installation contract will be priced under CPR 93.

IAC Report to Be Studied

The Automatic Temperature Controls Industry Advisory Committee bared data before the Office of Price Stabilization supporting the need for applying a uniform price increase factor to the industry.

OPS felt that the industry claims did not afford sufficient basis for the contention that there is an historically uniform price relationship between products and companies which would lend itself to application of a weighted industry-wide ceiling price adjustment factor. OPS agreed, however, to give further consideration to the industry recommendations that such a factor be applied to GCPR prices.

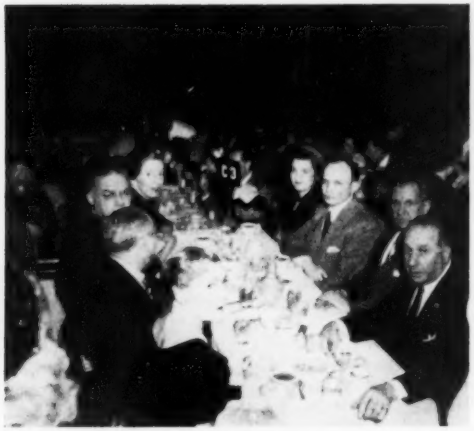
The advisory committee members tentatively agreed that controls coverage should include, but not be limited to:

• Controls for household and commercial appliances such as ranges, water heaters, washing machines, dryers, ironers and irons.

• Controls for home heating and cooling equipment and for farm and ranch appliances.

• Any safety device or automatic

(Continued on page 131)



Hyland Electrical Supply Co.

Englewood Electrical Supply Co.

Camaraderie In Chicago

DISTRIBUTOR SALESMAN Charles Thompson (left), assistant to the district appliance manager, Graybar Electric Co., receives the grand prize—a $400 check—and congratulations from C. C. Simpson, managing director of the association, for his winning idea in the association's sales booster contest.

Kubec Electric Co.

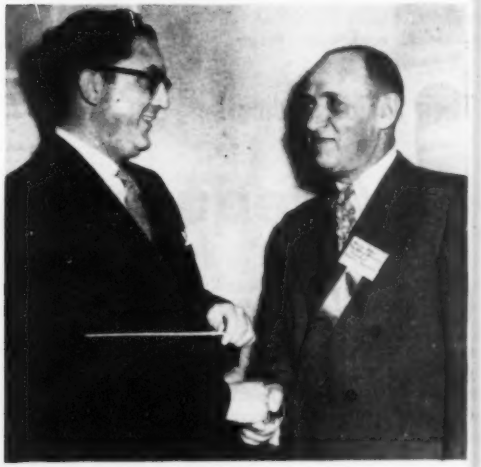
Revere Electric Supply Co.

Graybar Electric Co.

Efengee Electrical Supply Co.

A feeling of fellowship marked the annual dinner party of the Electric Association of Chicago, which was heavily attended by members of all segments of the industry. Local wholesalers (some are shown here), in particular, turned out in force.

Westinghouse Electric Supply Co.



DISTRIBUTOR EXECUTIVE Harry Alter (right), The Harry Alter Co., steps into his role as president of the Electric Association of Chicago and thanks Gerhard P. Schroth, leader of the Kraft Choral Club, for the enjoyable program of songs given by the club at the association's annual dinner party.

Capitol Electrical Supply Co.

Steiner Electric Co.

Excel Electric Service Co.

"I make money selling better wiring. My entire business success is the result of my efforts to promote better wiring . . . I've been getting $1,200 a wiring job for many $15,000 to $30,000 homes."— Q. M. Johnson, electrical contractor, Fargo, N. D.

"It has been my experience that the first reaction of the home buyer is neither for nor against adequate wiring. It takes the continuous application of adequate wiring advantages to convince him."—Morris Silberman, Westwood Builders, Dallas, Tex.

"All too many rural people . . . are not aware of the future needs of the electrical system of their farms. They are inclined to see it as just a few light bulbs and nothing more."—Lee W. Helgerson, Wild Rice Electric Cooperative, Mahnomen, Minn.

Their Major Finding:

Adequate Wiring Standards

CHICAGO—Within current limitations on the use of copper, small homes can be wired to the minimum standards of adequacy. This was generally agreed upon by delegates to the 8th National Adequate Wiring Conference recently held here.

Great care must be taken in the planning of circuit runs and in the location of service equipment, it was emphasized. But the 35-lb. copper limitation can be met in homes built for the mass market, although wiring in the larger homes will suffer.

• **Aluminum in Spotlight**—Tremendous interest in the possibilities of using aluminum wiring as a substitute for copper was expressed by conferees. Speakers pointed out that while aluminum is the most abundant metallic element on earth, great problems exist in its production and use for house wiring. No practicable solution has yet been found, and there is no knowing when satisfactory techniques will be devised. For the present, installers and suppliers of home wiring must live with the copper situation and make the best of it, it was stressed.

R. W. Wilson, chairman, wiring and specifications committee, Edison Electric Institute, outlined the exploratory work which that body has been conducting to determine whether aluminum can be developed as an alternate material for copper in small sizes for branch circuit wiring.

• **Plenty of Problems**—In using aluminum for branch circuit wiring, Mr. Wilson cited such problems as electrolytic action at connections, brittleness, cold flow, relative conductivity and tensile strength. Experience, reported to his committee, indicates that electrolytic effects are confined largely to damp locations and can be minimized by tinning or plating of terminating devices. Brittleness can be overcome by semi-annealing the wire to a state approximating that of copper, he said.

The problem of cold flow of aluminum under pressure at contacts may require redesign of connection terminals, according to Mr. Wilson. The use of one trade size larger aluminum wire is required to compensate for the lowered conductivity, which is only 63 per cent that of copper. Thus, No. 12 aluminum wire would be the equivalent of No. 14 copper.

Mr. Wilson pointed out that the lower tensile strength of aluminum is somewhat offset by the larger equivalent size; also by the fact that its lighter weight does not require as much pull when used in raceways.

• **Apply With Care**—D. G. Kimball, manager of engineering, Wiring Devices Department, General Electric Co., advised that care must be taken in the application of aluminum wiring in homes. He reviewed progress reports, both favorable and unfavorable, on investigations underway in laboratories and in the research departments of producers, particularly with respect to assuring good electrical conductivity and freedom from corrosive action at connections.

Successful application of aluminum conductors will require understanding of the connection problems by all users, inspectors and installers, Mr. Kimball said. He recommended development of a satisfactory, low-cost, low-resistance, non-oxidizing coating for the conductors as one possible solution. Another possibility is the development of a simple termination, easily and inexpensively applied to the con-

"Distributors cooperate with contractors through allocations, but this has eliminated the little guy who wires a house once or twice a year and then works in a factory the rest of the year."—Bruce O. Bowlus, Greater Toledo Adequate Wiring Bureau.

"We are now urging . . . electrical contractors . . . to send us their plans for wiring layouts, stressing the fact that . . . they can install an adequately wired job under present copper limitations."—M. Mentzer, Rocky Mountain Elec. League, Denver.

"Investigation indicates that the problem of electrolysis (of aluminum connections) has been considerably overemphasized. Electrolytic action appears to become a problem only in damp locations."—R. W. Wilson, Kentucky Utilities Co., Lexington, Ky.

Can Be Met in Small Homes

ductor on the job, which would be utilized to connect the wire to the copper alloy terminal on standard wiring devices.

• **Saving Copper**—The three speakers who discussed "Home Wiring Under the Controlled Materials Plan" had various suggestions to offer on how copper can be saved. One of them, C. B. Osborne, sales manager, Electric Power Board of Chattanooga, described the methods used in his area to meet the emergency.

He said that a survey revealed that installations certified for adequacy before the NPA order went into effect had about 20 lbs. more copper than the new restrictions allowed. The survey also showed that the greatest amount of copper was used in the service entrance cable. Savings were effected by more carefully planning the location of the meter and service entrance and, where possible, cutting down circuit runs to major appliances and heating equipment.

• **Contractor Can Save**—Mr. Osborne also pointed out that there are many small ways in which the alert electrical contractor can save copper. Eliminating square turns and doing more bit and brace work are two such conservation techniques. In one case, he said 4½ lbs. of copper were saved by mounting the service entrance panel at a height of six feet instead of four feet on a basement wall.

Also testifying that adequacy was being achieved in his area through careful planning was Meryl E. Mentzer, adequate wiring field representative for the Rocky Mountain Electrical League. As an illustration of how and where the wire is now being used, he cited a project of homes with a 1,200 sq. ft. floor area and two bedrooms.

"We arrived at a figure of 2,320 conductor feet of wire of various sizes and remained under the 35-lb. limit," he said. The breakdown, according to Mr. Mentzer, ran something like this:

- 60 ft. of 18/2 for door bell and furnace control.
- 900 ft. of 14/2 for general purpose circuits.
- 50 ft. of 14/3 for three-way switches.
- 80 ft. of 12/2 for appliance circuits.
- 15 ft. of 8/3 for range circuit.
- 10 ft. of 6/3 for entrance.
- 15 ft. of 6/1 for ground wire.

"The electrical contractor, by careful planning, can meet the adequate wiring standards in homes up to 1,400 or 1,500 sq. ft. of floor area, within the 35-lb. limit on copper," he said.

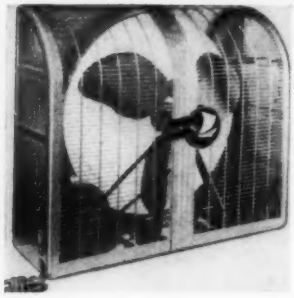
Bruce O. Bowlus, secretary of the Greater Toledo Adequate Wiring Bureau, also agreed that the NPA restriction can be met without sacrificing the minimum requirements for adequacy. In cases where adequacy cannot be obtained due to restrictions, he urged industry to plan systems with a view to subsequent modernization. In this way, home owners can be assured of ultimate service at a small additional cost for the equipment they plan to use.

• **Ingenuity the Answer**—Short of full-scale war, the odds are ten to one that the electrical industry will get the materials it requires, said Chicago electrical distributor Harry Alter, who is also president of the Electric Association of Chicago. Ingenuity and substitutions are the answers, he contends.

As a case in point, Mr. Alter cited a recent experience: "One of the industry's giants, television, was threatened with virtual extinction a year ago

(Continued on page 133)

NEW PRODUCTS

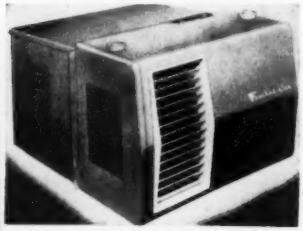


PORTABLE FAN

Large-model window fan is portable and adaptable to any double-hung window from 24 to 42 inches wide. The 22-inch fan is available in both single and two-speed models. It is big enough to do all the ventilating jobs in the average six-room home or apartment. The fan's capacity is 3,100 cubic feet per minute at 750 revolutions per minute. Complete with mounting brackets, fan has adjustable spacers, a 1/6-horsepower, 110-volt, 60-cycle, single-phase motor.

Viking Air Conditioning Corp., 5600 Walworth Ave., Cleveland 2.

▲

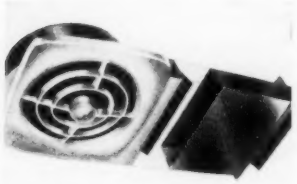


SINGLE-ROOM AIR CONDITIONER

Designed to provide effective air conditioning for single rooms only, window air conditioner comes in ½-ton capacity and ¾-ton cooling capacity. Unit draws fresh air in from the outside, filtering it and dehumidifying at the same time as it cools and circulates it throughout the room. Baffle arrangement enables directional air control.

Fresh'nd-Aire Co., 221 N. La Salle St., Chicago 1.

▲

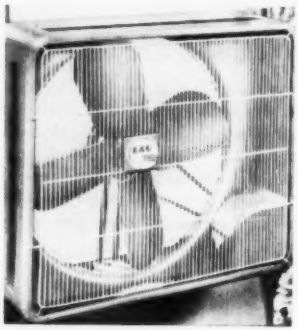


KITCHEN FAN

For installation anywhere in the kitchen, fan measures only 3½ inches deep, can be mounted on ceiling or side wall, and has an adjustable frame which fits between 16-inch studs or center joists. Blower-type blade maintains high air exhaust volume in long ducts, manufacturer claims. Fan has chrome or white enamel grill, which is removed by unscrewing a center knob. Fan size is 10 inches. A three-speed switch is also available with fan.

Berns Mfg. Corp., 2278 Elston Ave., Chicago 14.

▲

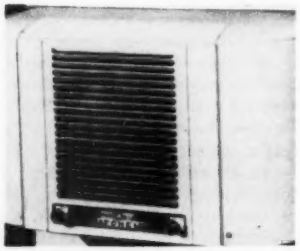


REVERSIBLE FAN

Two-speed, reversible window fan cools several rooms. It is available in two sizes, 24 inches and 30 inches. Fan will bring a volume of cool air directly into rooms or, by a flip of the switch, will exhaust hot, stale air out through the window while pulling cool air in through open windows or doors. Fan has two speeds, high or low.

The Lau Blower Co., Dayton 7, Ohio.

▲



WINDOW-TYPE AIR CONDITIONER

Manufacturer estimates that this air conditioner will operate on an electrical consumption of less than the current required to light six ordinary electric lamp bulbs. The window-type air conditioner features a mount which allows quick installation, even in windows as narrow as 23 inches. No filler panels are used to anchor window closed. Filter, according to manufacturer, removes 99.9 per cent of the dirt, dust and pollen from the air. The unit is finished in ivory, is 13⅛ inches high, 23 inches wide and 30¾ inches deep.

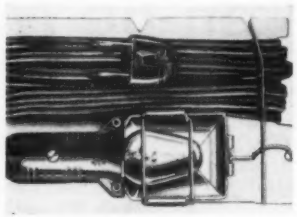
Mitchell Mfg. Co., 2525 Clybourn Ave., Chicago 14.

FLOOR CIRCULATOR

Containing a 100-volt ac motor, floor circulator comes equipped with a 12-foot cord to assure ease and mobility of placement. To protect rugs and floors, each leg is rubber tipped. Circulator's construction is steel, with hammered-enamel finish. Protective grille covers the 12-inch blade which is knob-controllable for three-speed adjustment. A flick of the wrist, says the manufacturer, gives 1,550, 1,150 or 850 revolutions per minute. Circulator delivers 2,000 cubic feet per minute.

Lakewood Engineering & Mfg. Co., 1756 W. Lake St., Chicago 12.

▲

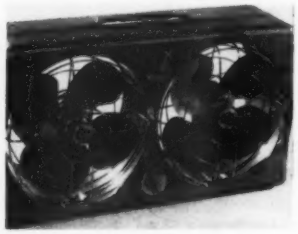


EXTENSION LAMP

Miniature extension lamp gets light to small out-of-the-way places. It plugs into any convenience outlet, and uses a 7-watt bulb. Other features include a polished reflector, snap-around guard, swivel suspension hook and 9-foot rubber cord.

Monowatt, Dept. of General Electric Co., Providence 7, R. I.

▲



TWIN-FAN VENTILATOR

Unique feature gives thermostatic control to double-fan ventilator. It turns fans on auto-

matically when temperature rises, and off when temperature drops. Dial can be set for desired temperature. Exhausts or intakes, can be moved from window to window, or used in room itself. Has three speeds, providing gentle, moderate or high velocity air flow. Fan dimensions are 27¾ inches wide, 16⅜ inches high and 9-1/16 inches deep.

General Electric Co., Bridgeport 2, Conn.

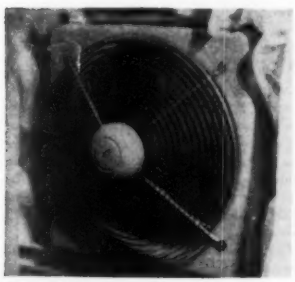
▲

CABINET DEHUMIDIFIER

Electric dehumidifier, that can remove up to three gallons of water from the air every day, is contained in a compact two-foot high cabinet. Air is drawn into the unit by a fan and passed over a copper-tubed evaporator. Excess moisture in the air condenses on the cold copper tubes and drains off into a 12-quart bucket. Dried air is then blown back into the room. The unit weighs 100 pounds, is 24 inches high, 14 inches wide, 19 inches deep and can be plugged into any conventional 115-volt ac outlet.

Westinghouse Electric Corp., Appliance Division, Springfield, Mass.

▲



TWO-WAY FAN

Electrically reversible fan cools two ways. As an exhaust fan, it pulls cool outside air through the rooms. As an intake fan, it circulates more air than the ordinary fan, the manufacturer claims. High and low speeds regulate air velocity as desired. It will cool several rooms. The 18-inch size delivers 2,500 cubic feet per minute and the 22-inch size delivers 3,400 cubic feet per minute.

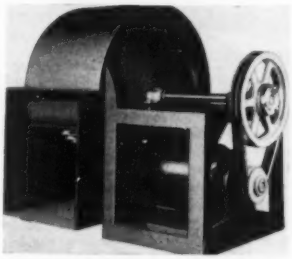
Hunter Fan and Ventilating Co., 400 S. Front St., Memphis 2, Tenn.

PORTABLE PAIL HEATER

Easily hooked on two nails, portable pail heater can be moved quickly from one spot to another. Consisting of a copper-sheathed electric element rated at 120 volts—1,500 watts, and an automatic safety switch, the heater is turned on by hanging pail on switch lever. Current goes off when pail is removed or when water boils down to heating element level.

Edwin L. Wiegand Co., 7500 Thomas Blvd., Pittsburgh 8.

▲

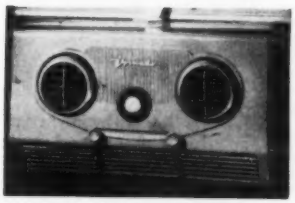


UTILITY BLOWERS

New models in belt-driven utility blowers include smaller units for use in electronic cooling and larger units for general drying, exhaust, ventilation and air-driven conveyor systems. Sizes range from 9-inch diameter wheels to 30-inch diameter wheels, with horsepower ratings from 1/6 to 7½. Main features include adjustable pulley speeds, vibration dampeners, weatherproof covers and interchangeable motors.

The Peerless Electric Co., Warren, Ohio.

▲

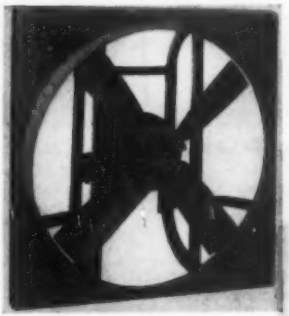


NO-DRAFT AIR CONDITIONER

Twin air directors of this window air conditioner give high-velocity and eliminate drafts through directional air flow to any point of the room. The twin air directors tilt up or down and rotate through a 360-degree arc, giving complete control of the flow of air. Removal of humidity is accomplished at the rate of 7½ gallons of water every 24 hours, according to the manufacturer.

O. A. Sutton Corp., Wichita, Kansas.

▲



INDUSTRIAL FAN

Heavy-duty, direct-drive fan can be used for industrial applications, duct work, mine exhaust systems and filtering units where large volumes of air are needed under static pressure. It is equipped with non-overloading, cast aluminum airfoil-type propellers. The motor is totally enclosed. Units are available in sizes from 16 to 48 inches, with air deliveries from 2,900 to 37,000 cubic feet per minute.

Chelsea Fan & Blower Co., Inc., Plainfield, N. J.

▲

HOUSE FAN

Strong wire mesh completely encloses the blades of new fan, making the fan safe for use in the nursery or near children or pets. The fan is a 12-inch oscillating model, and has an air delivery of approximately 1,000 cubic feet per minute. The fan is finished in frost gray with medium blue fan blades.

Chicago Electric Mfg. Co., 6333 W. 65th St., Chicago 38.

NEW PRODUCTS

FLOOR LAMP

A round tray, made of wood finished in nutmeg color and banded in black wrought iron, is the main feature of this new floor lamp. The tray is pierced in the center by the lamp's black wrought-iron shaft. The shade is of natural Philippine grass cloth, laminated with paper parchment. Measuring 53 inches in height, the lamp has a three-way bulb.

Lightolier, Inc., 346 Claremont Ave., Jersey City 5, N. J.

▲

PORTABLE RADIO

Front of portable radio is covered with plastic grille cloth and is hinged at the bottom so that it can be folded flush into the case. The set will operate on ac or dc current, as well as a light-weight, self-contained battery pack. It is available in maroon, forest green or gray plastic.

Motorola Inc., 4545 W. August Blvd., Chicago 51.

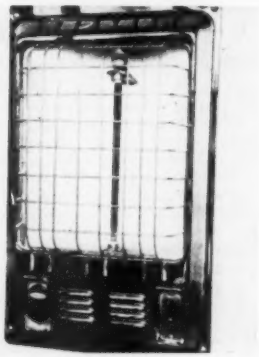
▲

DISPLAY SPOTLIGHT

Slimline spotlight was designed especially to provide dramatic effect for highlighting merchandise and displays. Spotlight may be mounted between other fixtures or at ends of rows or individually. A smooth gimbal ring permits easy adjustment of light in any direction. The entire unit is made of heavy durable 20-gauge steel and is finished in hard-baked white enamel. It is 10-inches long, 8⅞-inches wide and 5¾-inches deep.

Mitchell Mfg. Co., 2525 Clybourn Ave., Chicago 14.

▲



INFRARED WALL HEATER

Safety features are stressed in this infrared, recessed wall heater. Heating element is nonmetallic and will not transmit shock. Wire grille will not burn skin if touched. Heating element of sintered carbide compound, formed in a straight rod, will not burn out, is not affected by water and will not corrode, the manufacturer claims. In installation, the rough-in box mounts flush with flanges against the wall. It fits between studding spaced 14 inches, in a 3¾-inch wall. Operates on ac or dc, any cycle, at 1,000 watts.

Pryne and Co., Pomona, Calif.

▲

TIME-DELAY PLUG FUSE

Incorporating a time-delay "lag" link, this new plug fuse will safely absorb starting overloads and sudden current surges, preventing needless blowing, but giving protection to an entire circuit, the manufacturer reports. Fuse has safety glass top and is inspected by Underwriters' Laboratories.

Royal Electric Co., Inc., Pawtucket, R.I.

VOLT-AMMETER

High-current volt-ammeter measures up to 1,200 amperes, but is small enough to be carried in a coat pocket. It is of the snap-around type, which measures current instantly without being connected to the conductor. The reading can be taken without interrupting the circuit or shutting down equipment.

Pyramid Instrument Corp., Lynbrook, N. Y.

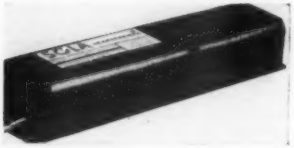
▲

CABLE CLAMP

Quarter-bend cable clamp has been especially designed to meet the need for a fitting suitable for bus-drop cable. Clamp can be used for suspending cable above machines and to anchor cable at the busway and machine. Two identical pieces form the device, joined by two heavy bolts. Installation is accomplished by tightening these bolts with the support in position.

The Adalet Mfg. Co., 14300 Lorain Ave., Cleveland 11, Ohio.

▲



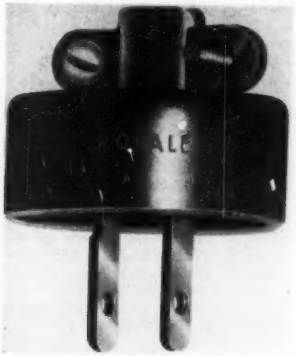
SERIES-SEQUENCE BALLAST

Series-sequence-type ballast affords an increased lamp starting current to assure full-

rated lamp life. Made for two 96 T-12 fluorescent lamps, it retains and improves on the advantages of conventional lag-lead ballasts, according to the manufacturer, who claims it is cooler, quieter, lighter, smaller, more efficient and less expensive than lag-lead ballasts. The case has a durable black wrinkle finish.

Sola Electric Co., 4633 W. 16th St., Chicago 50.

▲



ATTACHMENT CAP

Molded of Bakelite, this armored attachment cap has a metal cord clamp. The unit is listed by Underwriters' Laboratories, Inc., and has two parallel brass blades that fit any standard outlet. Cord clamp and armor are coated to resist rust and corrosion. The cap is also available with double-action spring blades that provide the tension grip required for special purposes.

Rodale Manufacturing Co., Inc., Emmaus, Pa.

▲

STEEL CLAMP

Fabricated of ductile, malleable steel, steel clamp for mounting light and heavy wall conduit is designed with one slip hole, taking up to ¼-inch diameter screws. It is zinc plated after fabrication, has double ridges for added strength, and the size is clearly stamped on each clamp.

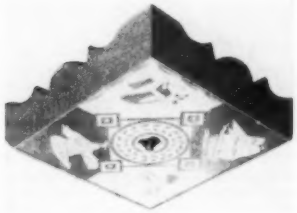
Victor Specialties, 775 Main St., New Rochelle, N. Y.

CASEMENT-WINDOW FAN

Available in two models to fit most standard metal casement windows, fan is installed by removing the window screen, setting the fan into the opening, and clamping into place with clips provided for the window screen. Fan is equipped with two 12-inch blades and a three-speed control.

Kisco Co., Inc., DeKalb St., St. Louis 4.

▲

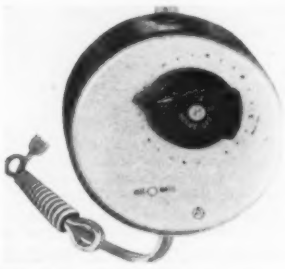


HOME FIXTURE

Scalloped frame with antique maple finish makes fixture suitable for room furnished with Early American furnishings. Fixture emphasizes close-to-the ceiling features with invisible method of suspension. Manufacturer's line also includes fixtures to harmonize with rooms decorated in French provincial, California ranch-style, modern, period and tropical.

Triangle Wood Products Mfg. Co., 130 N. Beaudry Blvd., Los Angeles 12.

▲



THERMOSTAT CONTROL

New thermostat control, described as a timer-heater, is powered by a fractional horsepower motor, operating from 110 a.c., 60-cycle wall outlets, through an attached 6-foot cord. The control is designed for application to thermostats regulating domestic stoker-fed, gas and oil heating systems. The manufacturer reports no rewiring of thermostats or major electrical alterations are necessary for the installation of the unit on a standard thermostat. A one-screw attachment of the unit to the thermostat and the plugging in of the cord completes the installation. Once the control is set for the number of hours heat is to remain lowered, no further adjustment is necessary.

Automatic Controls Corp., Ann Arbor, Mich.

▲

TIME SWITCH

New time switch is particularly adapted to use in the control circuit of clothes driers since it provides two circuits for the control of blower and heater, all in one unit. The two circuits are so arranged that the heater circuit may be broken at a predetermined time prior to the breaking of the blower circuit. This provides a cooling period before the actual shut-off of the appliance.

M. H. Rhodes, Inc., Hartford, Conn.

▲

LEVER SWITCH

Miniature, telephone-type lever switch is suited for use in instruments, radio equipment and communications systems. The single-hole mounting reduces assembly time and simplifies panel design, as the switch may be mounted in any position, according to the manufacturer. Lever action incorporates lock, non-lock and no-throw positions.

General Control Co., 1200 Soldiers Field Rd., Boston 34.

CLOCK-RADIO will turn on the radio to waken you, and during the day it will automatically tune in your choice of radio programs. Made in ebony, mahogany and in ivory.
Admiral Corp., 3800 Cortland St., Chicago 47, Ill.

NEW PRODUCT BRIEFS

DEFROSTER—Finished in baked white enamel, defroster has a Telechron synchronized motor. It is self-starting and has a switch of beryllium copper blades and heavy silver contacts. The defroster measures 4½ by 3 by 3 inches. The Tork Clock Co., Mount Vernon, N. Y.

8-QUART DEHUMIDIFIER—One-foot-square and 37⅞-inch-tall dehumidifier has 8-quart galvanized moisture receptacle. It is capable of wringing from 17 to 25 pounds of water from 10,000 cubic feet of air in 24 hours, the manufacturer reports. The unit has a ⅛-horsepower refrigeration compressor operating on any 60-cycle, 115-volt ac circuit. Mitchell Mfg. Co., 2525 Clybourn Ave., Chicago 14.

DUAL-PURPOSE FAN—Sixteen-inch, portable fan may be used as a window fan or circulating fan. The fan is adjustable in height from 28 to 48 inches, from floor to center of blades. Vertical tilt adjustment permits direction of air flow. Wheels permit portability. Emerson Electric Mfg. Co., 8100 Florrisant Ave., St. Louis 21.

TIME SWITCH—Cord-and-plug model time switch is designed for easy plug-in installation. Switch automatically controls electrical circuits for one "on" and one "off" operation during any 24-hour period with additional riders available. Meter and Instrument Dept., General Electric Co., Schenectady 5, N. Y.

DUCT BOOSTER FAN—Belt-driven fan, with motor outside of air stream, is equipped with non-overloading cast aluminum air-foil-type propellers. Motor is explosion-proof. Units are available in sizes from 16 to 36 inches and air deliveries from 2,700 to 23,000 cubic feet per minute. Can be used in paint spray booths, large-range hood exhausters or in ventilating heating systems. Chelsea Fan & Blower Co., Inc., Plainfield, N. J.

MOTOR STARTER—NEMA-size 0 and 1 manual motor starters with built-in indicating lights are mounted in NEMA-type I enclosures. Indicating light generally is used to show whether the starter is on or off, but can be wired into the circuit to indicate other conditions. The light can be provided for ac voltages of from 110 to 600 volts. Westinghouse Electric Corp., Box 2099, Pittsburgh 30.

PORTABLE LIGHT—Grounded portable light includes an approved three-wire convenience outlet. Outlet is part of the molded handle. With the outlet in the handle, power tools can be quickly connected at the working area without extra extension cords. Portable light is available with two designs of lamp guards. One design features a concentrating end lens and rotary reflector for focusing light, and the other has a standard cage and reflector. McGill Mfg. Co., Valparaiso, Ind.

CONTINUITY TESTER—Pocket-size continuity tester has been designed to determine continuity of circuits and identify wires between terminals or in multi-wire cable, as in switchboards and control panels. It provides its own power, and uses a signal light indicator which illuminates the point of contact. Ideal Industries, Inc., Park Ave., Sycamore, Ill.

RELAY—A relay combining lighting arrestor, fused coil and load circuits with standard 30 ampere mercury plunger relay is available with or without fuses and arrestor, whichever is required for street lighting circuits. Relay is mounted in a welded, hot-dip galvanized, weather-proof housing for pole or other outdoor mounting. It is available in types for both normally closed or normally open pilot circuits. The relay is hermetically sealed in a glass tube. H-B Instrument Co., 2507 N. Broad St., Philadelphia 32.

MATCHING KNOCKOUT — New matching tangent knockout eliminates time-consuming conduit bending when ganging electrical devices. It provides ½ to ¾-inch concentric knockouts with larger knockouts in a tangent pattern. The common center of the two smaller knockouts is a constant distance from the rear of the enclosure. According to the manufacturer, this automatically positions the tangent pattern, thus insuring matching knockouts regardless of size of cluster or device rating. Square D Co., Detroit 11.

PORTABLE DEHUMIDIFIER—Portable electric dehumidifier is 17 inches high by 12 inches wide by 18 inches long, and weighs 58 pounds. It features a drawer into which the water drops. Drawer can be removed so water can fall directly into a drain. According to manufacturer, it removes 2 to 3 gallons of moisture from air in 24 hour period. Unit has ⅛-horsepower condensing unit, draws 200 watts, and operation is for 115 volts, 50/60 cycles, ac current only. Fresh'nd-Aire Co., 211 N. La Salle St., Chicago 1.

T-SLOT RECEPTACLE—T-slot duplex receptacle has heavy-gauge terminal screws with large heads, backed out and ready to receive wire. Made for heavy duty service and endurance, its double blade contacts are made of a special phosphor bronze without riveted connections. Comes in both brown and ivory, and has solid all-Bakelite back. Eagle Electric Mfg. Co., 23-10 Bridge Plaza South, Long Island City 1, N. Y.

CONNECTORS—Line of connectors are made of malleable iron and are electro galvanized. Their throats, according to the manufacturer, are free of fins or burrs that injure insulation. They are machined with free-running threads and are equipped with heavy-gauge binding locknuts that can be tightened securely with minimum effort. Both the hinge-type and the screw-type are designed to save installation time. Steel City Electric Co., Columbus Ave., Pittsburgh 33.

FUSIBLE PANELBOARDS—Expansion of fusible panelboard line now makes available panelboards with main lugs or main switches from 4 to 40 branch circuits for use on a.c. or d.c. applications. Panelboards provide plug fusible branches with heavy-duty toggle switches for lighting and appliance circuits. Lighting panelettes are also available with either lugs or circuit-breaker mains from 2 to 40 circuits for use on a.c. lighting and appliance branch circuit applications. Square D Co., 6060 Rivard St., Detroit 11.

CONTACTOR — Solenoid-operated contactor is designed to withstand severe loads based on Type C lamps. Constructed on the straight line principle, the solenoid is connected directly to the contact bar, simplifying the wiring so that easy access may be gained to any part for quick inspection and service. Available in two models, 25 or 50 amperes. Zenith Electric Co., 154 W. Walton St., Chicago 10.

TABLE TAP—Providing twin outlets equipped with bronze double-wiping contacts, table tap is rated at 15 amperes—125 volts, or 10 amperes—250 volts. Cover can be lifted off by removing a single screw. Available in brown or ivory. John I. Paulding, Inc., New Bedford, Mass.

FIVE-COLOR dealer aid clips firmly to the top of dehumidifier unit. Pictured and explained to the unattended customer are the applications this space-saving unit can be put to in the home, business place, factory, print shop and store. *Mitchell Manufacturing Co., Chicago, Ill.*

ACTUAL SETTING is effectively reproduced in this demonstration ironing board. Specially imprinted cloth invites the customer to try the iron on simulated shirt front complete with buttons and pocket. Display, 2' x 1' at the base, tapers to 6" at one end. *Westinghouse Electric Corp., Appliance Div., Mansfield, Ohio.*

Silent Salesmen Sell Plenty

Show your dealers how more sales are started —with least amount of time or effort on their part—through use of more effective displays

FAST SELLING ITEMS for residential lighting are featured in this attractive two-color lighted fluorescent fixture display. Ideal as "traffic stopper" salesman. *Markstone Mfg. Co., Chicago, Ill.*

CUT-OUT for display fits directly over liquifier-blender and is used to point up sales features of product. Display piece takes up no extra counter room. *John Oster Mfg. Co., Racine, Wis.*

GIFT PACKAGE containing twin night lights, one blue, one ivory, folds back into handsome display. Compact package serves well where counter space is small. *Monowatt, Providence 7, R. I.*

COFFEEMAKER sets on reproduction of silver tray. Background of maroon cartouche illustrates cup, saucer and napkin. Display is large enough to hold one coffeemaker, compact enough to take up minimum space. *Landers, Frary & Clark, New Britain, Conn.*

COMPACT CARTON serves as counter display as well. Its cover folds back to become a striking two-color counter card. It holds 18 packaged rolls. *Plymouth Rubber Co., Canton, Mass.*

News Notes From N.A.E.D.

By William C. Pirie,
Public Relations Manager
National Association of Electrical Distributors

RESIDENTIAL LIGHTING SALES CONTEST

At the meeting of NAED's Residential Lighting Committee held in January at the Conrad Hilton Hotel, Chicago, the American Home Lighting Institute Sales Competition was fully presented to the Committee members.

This competition, running from January 1 to May 1, 1952, is open to lighting fixture sales managers in the wholesale distributor field for outstanding performance in sales training, sales promotion and publicity on residential lighting fixtures.

Competing lighting fixtures sales managers will have to meet the three specific requirements of establishing and submitting in writing their own sales training program which is in operation during contest period; devise and submit in writing their sales promotion schedule for the contest period; and work out a definite program of publicity and submit it in writing with supporting clippings.

All entries must be mailed to reach the American Home Lighting Institute, c/o A.A.A., 130 West 57th St., New York, N. Y., not later than May 15, 1952.

Duplicate prizes will be awarded in two classifications: sales managers in cities of under 100,000 population, and sales managers in cities of over 100,000 population. First prize winner in both classifications will receive $1000 in cash, a scroll and an engraved watch; second prize winner in both classifications will receive $250, a scroll and an engraved watch.

Winning awards will be presented at the 44th Annual NAED Convention, Atlantic City, June 8-12, 1952.

Broadsides describing the contest have been mailed to all distributors and additional information may be secured by writing to the above address.

At the Committee meeting it was stressed by both Chairman J. I. Bogdan and Executive Director Chas. G. Pyle that 1952 would be a year of high sales volume in the residential lighting fixture field, but that aggressive promotion and sales effort would be required throughout the year.

HOUSEWARES CAMPAIGN WINS COMMITTEE ENDORSEMENT

Down-to-earth, aggressive selling will also be the order of the day for electric housewares during 1952, according to opinions expressed at the meeting of the Electric Housewares Committee held at the Conrad Hilton Hotel in January.

Ways and means of building the electrical distributor's position of dominance now held in the industry were fully discussed. In the committee's opinion this is entirely possible, but only by a diligent effort on the part of the distributor himself through such things as more effective utilization of the many promotional items available to him.

In the evening the committee met with a large group of electric housewares manufacturers, who are members of NEMA, and heard the NEMA electric housewares spring gift campaign presented by J. P. McIlhenney, Waring Products Corp., and chairman of the Promotion Committee of the Electric Housewares Section of NEMA.

The campaign was endorsed by NAED's Electric Housewares Committee and Chairman Fingrutd pledged NAED's whole-hearted cooperation in the 1952 campaign. A special committee has been appointed to study and recommend a program of cooperation by electrical distributors. This committee consists of J. R. West, Graybar Electric Co., Inc., New York; John T. O'Brien, Peirce-Phelps, Inc., Phila.; J. B. O'Neil, Masback, Inc., New York; and J. H. Beller, Beller Electric Co., Newark.

The 32-page spring campaign sales plan book has already been mailed to association members.

CONDENSED CATALOG PLAN ENTHUSIASTICALLY RECEIVED

The condensed catalog plan recently presented by NAED to its members is a most valuable and economical addition to their sales programs and it has been highly endorsed at the many area meetings.

Under this plan, association members can secure an accurate and conveniently indexed catalog, individually covered, and running from 64 to 128 pages at very reasonable cost. In such a condensed catalog it is possible for the electrical distributor to list all the electrical items of major importance that he handles. It fills a need that has long existed in the electrical distributing industry.

At the present time the condensed catalog plan is available for electrical apparatus and supplies, but it will also be available shortly for electrical appliances, including both major and all electric housewares.

MAJOR APPLIANCE COMMITTEE TOLD OF POWER ADEQUACY

In addressing the Major Appliance Committee of NAED at their recent meeting in Chicago, Merrill E. Skinner, vice president, Union Electric Co., St. Louis, and representing the Edison Electric Institute, discussed the adequacy of the electric utilities to amply supply power to meet the present demands. He outlined to the members

how the utilities are constantly planning for three years ahead and how they will be more than able to meet the ever-increasing demands for electric power. Mr. Skinner pointed out the fact that the electric utilities fully realize the need of aggressive and intelligent programs of sales training.

This meeting of the Major Appliance Committee, under the chairmanship of K. G. Gillespie, Jenkins, Wholesale Division, Kansas City, was preceded on the previous day by the individual meetings of the sub-committees that form the Major Appliance Committee of NAED. These committees are: refrigeration, freezers, room conditioners and water coolers—chairman, H. S. Schiele, Artophone Corp., St. Louis; laundry equipment—chairman, G. I. Cohen, Northeastern Distributors, Boston; and kitchen equipment—chairman, R. C. Litchfield, Graybar Electric Co., Inc., New York City.

FATHER AND SON BANQUET PLANS SET FOR CONVENTION

At a recent meeting in Chicago, the Father and Son Banquet Committee, chairmanned by Titus B. Schmid, Crescent Electric Supply Co., Dubuque, and with Robert Gross, Gross Distributors, Inc., New York, as co-chairman, set up the initial plans for this outstanding convention event.

Growing in popularity each year the banquet is expected to draw a capacity attendance in '52. It will be held on Tuesday, June 10th, at 7:00 P.M. during the 44th annual NAED Convention at **Atlantic City.**

D.P.A. News Digest
(Continued from page 119)

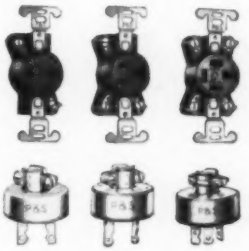
valve that is part of, or used with, a control.

The industry agreed that coverage should not include industrial process controls, steam specialties, refrigeration expansion valves and aircraft controls.

OPS Hits Service Trades

Approximately 75 injunctive actions have been filed by the Office of Price Stabilization against service trades establishments for failure to keep and file records and reports required by CPR 34.

Edward P. Morgan, OPS director of enforcement, stated that service trades establishments thus far have paid to



EASY-TO-WIRE POLARIZED OUTLETS and CAPS

10 and 20 Amperes
2, 3 and 4-Wire

P&S

MAKERS OF FINE WIRING DEVICES For MORE THAN 60 YEARS

PRECISION MANUFACTURING

SKILLFUL ASSEMBLY

THOROUGH TESTING

P&S Wiring Devices are designed and manufactured to unusually high standards for dependability of performance and ease of wiring. They meet or exceed the minimum safety standards of existing testing agencies.

Sold Through Electrical Distributors
For Complete Information Write Dept. W

PASS & SEYMOUR, INC.
SYRACUSE 9, NEW YORK

NOW! Fill Every Screw Driver Need with ...

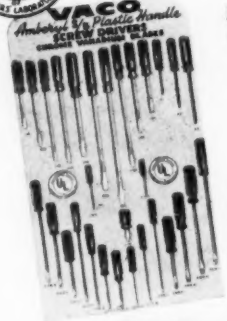
VACO

BREAK-PROOF
SHOCK-PROOF
Screw Drivers

More Sizes ... More Types ... More Kits Are Available To You ... From VACO

● No more "lost sales" when you carry Vaco ... the nationally advertised, nationally known line of quality drivers with famous Amberyl S/B (slo-burn) handle. Whatever your customer wants ... screw drivers, nut drivers ... special purpose kits ... unusual bit styles ... "reversibles" ... interchangeable blade drivers ... they're all available from this one source. And to help you get those *extra* impulse sales, Vaco offers you more counter displays, more "buy off the board" and permanent wall displays than any other manufacturer in the business! Quality? It's "tops"! Prices? In line! Margins? Your full profit every time!

UL Fire Safe Handles!



Let This Display Help You Sell

The Vaco C 110U permanent wall display shows 30 different drivers to everyone who sees it ... acts as a perpetual silent salesman. Order one today for extra sales and extra profits!

Get Your FREE Copy of this Handy, Illustrated Catalog and Reference Book

You can't afford to be without this veritable gold mine of information! Tells you all about bit sizes to fit every screw ... lists the various drivers by type and size. Amply illustrated in color. Order your copy, *today*.

VACO PRODUCTS CO.

317 E. Ontario St., Chicago 11, Illinois

In Canada: Vaco-Lynn Products Co., Ltd.
204 Laurier Ave., W., Montreal 8, Quebec

the U. S. Treasury more than $60,000 in single, double and treble damages as a result of overcharges, and have also made restitution to customers in the amount of about $140,000.

To date more than 130 cases have been referred to the Department of Justice with recommendations that injunctions be sought against the alleged delinquent service establishments. Similar action is contemplated against 425 other companies, Mr. Morgan said. Of the 75 injunctive actions already filed in the U. S. District Courts, the requested injunctions already have been granted in 16 cases. The remainder are expected to be acted upon shortly.

Service trades against which OPS has already taken injunctive action, includes laundries and dry cleaning establishments, garages and service stations and radio and television firms.

OPS Bares Proposed Rules

A joint meeting of two industry advisory committees were told by the Office of Price Stabilization that variations within the consumer goods fields posed many problems in the drafting of an effective regulation fair to all elements of the industry. This fact was brought out recently at a discussion of a proposed wholesale price regulation designed to supplant the GCPR and Supplementary Regulation 29 to the GCPR which now govern pricing in the consumer goods industry.

Members of the Wholesale Consumer (small) and the Wholesale Consumer (large) Durable Goods Industry Advisory Committees were told by OPS officials that the proposed regulation would cover all commodities customarily considered to be consumer soft goods, large durable goods, and small durable goods. All goods within the general classification of such goods would be included except industrial machinery and other commodities now or hereafter covered by other regulations. It would be a margin-type regulation, giving each wholesaler his own historic markups by categories of goods. The pricing chart technique would be used, and it would be similar in principle to the pricing chart provided in the retail regulation, CPR 7. A major difference between the chart proposed in the wholesale regulation and the charts used under CPR 7 would be that the wholesaler would establish his own categories rather than use those prescribed in the regulation.

The discussion brought out four

main industry viewpoints on pricing:

- A pricing chart should be avoided; preparation and use of it would impose a heavy burden on individual sellers.
- The base period established in the GCPR—December 19, 1950, to January 25, 1951—would be preferable to a current base period.
- Instead of a single regulation covering all, there might be several covering different fields.
- Landed costs should be the basis for computing chart markups and for determining current ceiling prices.

Adequate Wiring Standards Can Be Met in Small Homes

(Continued from page 123)

when Washington advised manufacturers that the use of nickel (essential for loud-speakers) must be reduced some 80 per cent; yet they are still making TV sets and the scarcest thing in sight now is warehouse space to store 'em." He concluded by urging the industry to go full steam ahead on adequate wiring promotion, for the market will be there—today, tomorrow and always.

• **Dallas Gaining**—"Of approximately 300 Dallas home builders, 120 are actively participating in the adequate wiring program and have had one or more homes certified," said R. M. Douglass, home service director, Dallas Power & Light Co. In explaining the workings of the Dallas AW program, he said that the builder is the man who gets prime sales attention.

So far, this policy has led to a six-year certification average of 3.39 per cent of the total home building in Dallas. Last year's certified portion of the total was 6.9 per cent, with a substantial overall increase in general wiring levels.

Morris Silberman, president of Westwood Builders, Inc., Dallas, then testified on the sales advantages of adequately wired homes. His organization has built 400 certified units to date. The wiring has such appeal to prospects that it is plugged by the firm in all its newspaper advertising, he said.

• **Selling AW Pays**—"I make money selling better wiring," said Quentin Johnson, electrical contractor of Fargo, N. D. "My entire business success is the result of my efforts to promote better wiring."

It's no job to get people to spend

Start this COP* on your Sales Force!

YOU can't resist a COP*. He's always on the job . . . ready to start fluorescent tubes, cut out bad ones, or protect circuits. He saves your customers' money and keeps them coming back to you.

The ROBOT COP, newest of Sylvania's "finest," starts tubes under the toughest conditions. He keeps good tubes on the job . . . for keeps. That's because he cuts out bad ones and resets himself automatically when a tube is replaced.

And remember, the low-cost GLOSTAT starts fast, lasts long, and takes terrific punishment.

There's a Sylvania starter for every fluorescent installation. Every day more dealers profit by selling Sylvania. So stock up now! Put Sylvania starters on your sales force. For complete details address: Sylvania Electric Products Inc., Dept. L-3203A, 1740 Broadway, New York 19, N. Y.

**COP stands for Sylvania's Cutout Premium Starter*

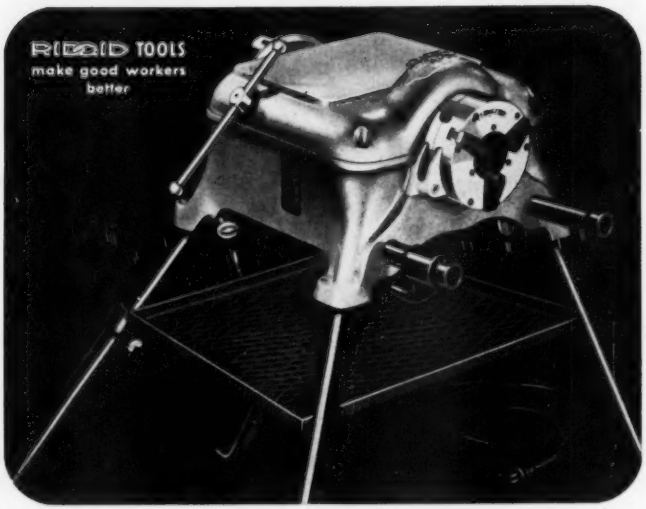
SYLVANIA

FLUORESCENT TUBES, SIGN TUBING, FIXTURES, WIRING DEVICES; LIGHT BULBS; RADIO TUBES; TELEVISION PICTURE TUBES; ELECTRONIC PRODUCTS; ELECTRONIC TEST EQUIPMENT; PHOTOLAMPS; TELEVISION SETS

WHY MOST ELECTRICIANS Demand

RIDGID

"400" PORTABLE POWER DRIVE



RIDGID "400"—*bench model or stand with tray, capacity ⅛" to 2"—to 12" with geared tools.*

Fast-selling portable power for hand threaders, cutters, reamers

★ Extra light weight unit—one man can handle it.

★ Lots of power—universal motor, forward, reverse, won't bog down on large conduit.

★ RIDGID design 3-jaw chuck, chuck wrench ejector; self-centering workholder in rear turns with conduit.

★ Sealed-in lubrication—no oil to spill.

★ Don't miss the easy profits on this popular "400"—write for complete facts.

THE RIDGE TOOL COMPANY • ELYRIA, OHIO

★★★ RIDGID Work-Saver Pipe Tools ★★★

more money for a good job, according to Mr. Johnson. "They will thank you for your efforts and recommend you to their friends."

He described his sales program, which includes intensive advertising in five motion picture theaters and in newspapers, and the use of adequate wiring decals on trucks. Additional aid from Northern States Power in the form of newspaper advertising and sales and layout assistance has helped put his story across, he said. The result: plenty of work from individual customers, a large volume from several local builders who rely on him exclusively, and cooperation with six appliance dealers who send a lot of business his way.

• **From Straws, a Broom**—Lee W. Helgerson, educational director, Wild Rice Electric Cooperative, Mahnomen, Minn., said that to make a broom, many straws must be bound together. "So it is with our adequate wiring program. Many parts make up the whole. We bind the various straws together to form the strong substantial program."

Mr. Helgerson described the co-op's adequate wiring activity which, through the combined efforts of Wild Rice, the State Board of Electricity, electrical contractors and co-op members, has been outstandingly successful in advancing the cause of adequate farm wiring. The program includes:

- Pre-wiring meetings to inform new members of the value of adequacy.
- Regular plugging of AW in the co-op's monthly newsletter to members.
- Presentations by staff personnel at all types of meetings—4-H, county extension, conservation, farm home, Farm Bureau and Farmers' Union.
- Exhibits in county fairs, crop shows, etc.
- Presentations on AW before veterans' agriculture classes.
- Holding of welding schools, appliance shows and cooking schools.
- Sponsorship of floats in local parades.
- Joint sponsorship with a neighboring co-op of regular radio programs.

Wild Rice Electric Cooperative plans a re-inspection program in the near future, Mr. Helgerson said. Every farm in the area will be covered because "farmers have a habit of adding to their existing wiring regularly. Our intention is for each and every member to feel sure that they have adequate and safe wiring."

CHICAGO—During the discussion at the Adequate Wiring Conference

here on the possibilities and problems in the use of aluminum for house wiring, Arthur H. Jones, general sales manager of the Madison Electric Co., Detroit electrical wholesaling firm, posed the following question:

"What would develop if there were a greater encouragement in the use of aluminum in the larger sizes of conductor? I would imagine that the tonnage of copper that is consumed in the large sizes—#1 or #1/0—would take away considerable pressure as far as availability is concerned for homes."

He got his answer from H. V. Van Valkenburg, district manager, Anaconda Wire & Cable Co. What Mr. Van Valkenburg said, in part, was:

". . . Obviously, the place to use aluminum first, and at the same time effect the greatest saving of copper, is in the large sizes of conductors. If we, as a company, were restricted, just for the sake of conversation, to 70 per cent of the copper we made and thereby were forced to substitute 30 per cent aluminum, we would start with the ACSR, which is a proven product. Next, we would go to distribution conductors, which constitute a large percentage of material we use. That would involve bare conductors, weatherproof conductors and service cable, which we are making in aluminum.

"In the case of our own operations, we have substituted sufficient aluminum so that we would be completely clear to take care of all other requirements in copper. In magnet wire, again, we are very active in investigating the field, for it seems to us that when you investigate all factors you must recognize that in the final analysis it is the economies that determine the final decision. In the case of insulated cables, we must recognize the increased cost of insulation, the increased dimensions, the increased weight of lead sheathing or other sheathing materials, the restricted conduit space—all of which, in the case of aluminum—tend to increase the cost and, to a greater or lesser degree, to minimize possible savings in use of aluminum.

"As for the utilities who have the problem of transmitting large blocks of power—'express runs'—consideration should be given to the use of aluminum on the long and heavy run so as to save copper for the many diversified places where it is being used. There are, of course, many places where an alternate is not known to be workable, so anything done in the interest of conservation would help."

Exclusive New Quick-Opening Quadritype Die Heads

ON THE NEW

RIDGID

"500"

Pipe & Bolt Threading Machine

New "500" Quadritype Die Head can be instantly adjusted from 1" to 2" conduit regardless of position of quick-opening lever—and without removing dies or die head from machine

★ Also improved Dualtype Die Heads, one for ¼" and ⅜", one for ½" and ¾", same instant size change *right in the machine.*

★ Also separate Monotype Die Heads available, ⅛" to 2", bolt die heads, ¼" to 2".

★ All tools in the "500" thread, cut, ream independently, and right up to chuck, swing out of way when not in use.

★ With a score of other sensational new features, new "500" is a money-maker you can't afford to miss. Write for the facts.

THE RIDGE TOOL COMPANY • ELYRIA, OHIO

★★★ RIDGID ★★★

Work-Saver Pipe Tools

STOCK WHAT YOU CAN SELL!

Name Brands

in your signal line

HOLTZER CABOT

STANLEY & PATTERSON

FARADAY

KODAIRE

A heavy duty all-electric air blast signal for difficult coding and general alarm where noise levels are high or varied. It's a "must" with plants that need a high power trumpet-blast for attention. Faraday Kodaire is weather-proofed for outside use—for permanent use in mills, industrial plants and foundries. Kodaire is the one "special alarm signal" customers want. Make it your leader in the "special group".

BUZZER . . . It gives a clear sharp buzzer note of good volume and high frequency. Volume may be increased or decreased by a simple screw adjustment. Fits into the famous Faraday Uni-Pact mounting system. Comes in black crackle finish—or may be specified in red enamel for fire alarm purposes. Write for a catalog on Sperti Faraday signals.

Sperti Faraday Inc.

ADRIAN, MICHIGAN

BELLS • BUZZERS • HORNS • CHIMES • VISUAL AND AUDIBLE PAGING DEVICES AND SYSTEMS

NEWS

(Continued from page 118)

Titus B. Schmid, president of the company, which has headquarters here.

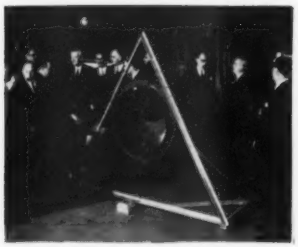
The new executive vice president, who was formerly appliance sales manager of the company, has made known several headquarters appointments. They are Eugene F. McGreevy, major appliance sales manager; George W. Jacobsen, television, radio and housewares sales manager; and Harold B. Demkier, product service manager.

Ford To Spend $500,000 To Light Assembly Plant

KANSAS CITY—One of the largest fluorescent lighting installations of its kind since World War II will be required to illuminate the new airplane wing assembly plant now being built by the Ford Motor Co. here.

A contract, calling for almost $500,000 worth of fluorescent lighting fixtures to light the 1,250,000 square feet of factory and office space, was recently awarded to General Electric Supply Corp., Kansas City, for fixtures manufactured by the Electro Mfg. Corp., Chicago.

The plant, according to L. K. Schoenbrod, president of Electro, will be equipped with Electro's RLM-approved two-lamp, eight-foot slimline industrials throughout the 1,200,000 square feet of factory space. One of Electro's newest units, featuring a molded louver of styrene with one-inch by one and one-half inch apertures, will be used to light the office areas, in addition to Electro troffer units.



PRODUCTION TEAM, composed of British industrialists visiting this country under the auspices of E.C.A., inspects a sound level test on a new model ventilating fan in the research laboratory of the Ilg Electric Ventilating Co., Chicago. J. M. Frank, president of Ilg, is shown second from right.

CALENDAR OF EVENTS

Electrical Manufacturers Representatives Club of New England
Electrical Trade Show
Exhibition Hall, Mechanics Bldg.
Boston, April 16-18

Mass. Electrical Contractors Assn.
Building Trades Tool Show
Bradford Hotel
Boston, April 16-18

Rocky Mountain Electrical League
Spring Conference
Shirley Savoy Hotel
Denver, April 20-22

National Industrial Service Assn.
Annual Convention
Conrad Hilton Hotel
Chicago, April 20-23

International Lighting Exposition
Cleveland Municipal Auditorium
Cleveland, May 6-9

National Assn. of Electrical Distributors
Annual Convention
Atlantic City, June 8-13

Illuminating Engineering Society
National Technical Conference
Edgewater Beach Hotel
Chicago, Sept. 8-13

Lake Michigan Club
Annual Meeting
French Lick, Ind., Oct. 1-2

Eastern Electrical Wholesalers Assn.
National Electrical Industries Show
165th Regiment Armory
New York, Oct. 14-17

Two Long Island City Firms Bought by Sylvania Electric

NEW YORK—The assets of A. W. Franklin Mfg. Corp. and the Franklin Airloop Corp. of Long Island City, N.Y., have been purchased by Sylvania Electric Products Inc.

Arthur L. Chapman, vice president and general manager of the radio and television division and the parts division, has reported that the Long Island City operation under Sylvania ownership will continue to manufacture and sell the same products as were formerly made by the Franklin companies, but that the unit production probably will be expanded.

New Program by BullDog Hastens Panel Delivery

DETROIT—The BullDog Electric Products Co. is now merchandising its circuit breaker panelboards under a new program. The program makes lighting panels available for immediate delivery from the distributor's shelves.

Panels formerly had to be ordered from the factory, since the distributor could not anticipate a customer's needs. This meant lengthy delay. Now the

QUAD LIGHTING

RLM Glassteel Diffusers

REFLECTORS
INDOOR . . . OUTDOOR
Porcelain Enameled
White Inside . . . Green Outside

RLM Standard Dome

RLM Angle

RLM Deep Bowl

A Quality Standard that Promotes Better Business

Built up to definite standards for excellence of service, QUAD Reflectors fully meet user approval.

QUAD GLASSTEEL DIFFUSERS: Reflector and globe together may be taken down for cleaning without extinguishing the light or removing the hot lamp. Available with pendant, outlet box, or horizontal hood.

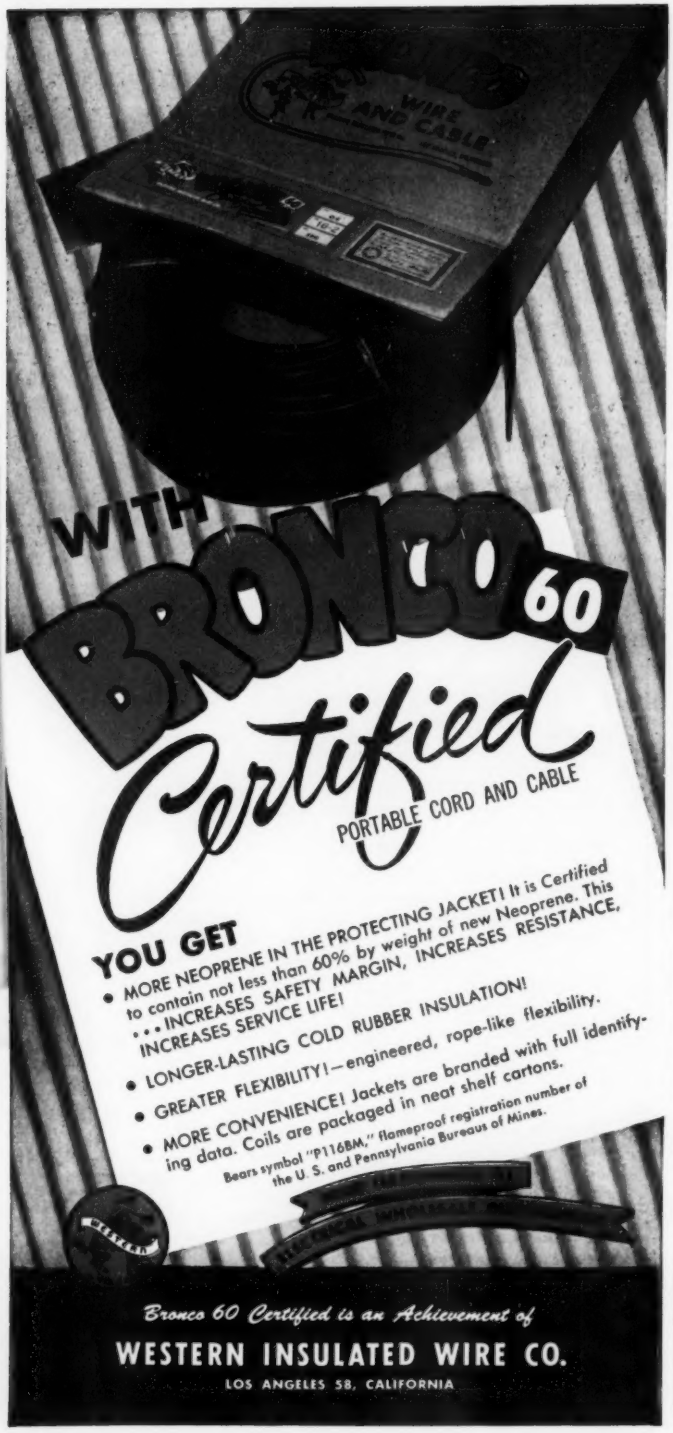
QUAD SOCKET REFLECTORS: 5 styles made in various sizes for general industrial illumination. Solid neck construction eliminates all exposed joints and seams. Each has a weatherproof top fitting and is available with shock absorbing sockets as well as the standard rigid socket.

QUAD SHADE HOLDER REFLECTORS: 5 styles made in various sizes. The Standard 2¼" fitter adapts them for use with any screw or other type shade holder.

HEAVY THREADED REFLECTORS AND SOCKET HOODS: Especially serviceable for railroad yards and industrial locations where atmospheric conditions require sturdy lighting equipment that can be easily removed for cleaning. Made in 4 reflector styles.

• *See the complete line in our Condensed Catalog No. 7*

QUADRANGLE MFG. CO.
325 S. PEORIA ST. CHICAGO 7, ILL.


WIRE AND CABLE
WITH
BRONCO 60
Certified
PORTABLE CORD AND CABLE
YOU GET
• MORE NEOPRENE IN THE PROTECTING JACKET! It is Certified to contain not less than 60% by weight of new Neoprene. This ... INCREASES SAFETY MARGIN, INCREASES RESISTANCE, INCREASES SERVICE LIFE!
• LONGER-LASTING COLD RUBBER INSULATION!
• GREATER FLEXIBILITY!—engineered, rope-like flexibility.
• MORE CONVENIENCE! Jackets are branded with full identifying data. Coils are packaged in neat shelf cartons.
Bears symbol "P116BM," flameproof registration number of the U. S. and Pennsylvania Bureaus of Mines.
Bronco 60 Certified is an Achievement of
WESTERN INSULATED WIRE CO.
LOS ANGELES 58, CALIFORNIA

distributor can meet customer specifications and provide a complete panel right over the counter. A basic device consists of a cabinet, front and an interior which already contains either four or six breakers.

The customer merely informs the counterman of his preference for interior, type of front and the number and type of additional individual breakers. The counterman pulls each component part from his shelves to make up the desired panel.

The company reports only five panelboards will cover hundreds of applications. This includes factories, commercial buildings as well as institutions.

Burndy Engineering Opens Connecticut Headquarters

NORWALK, CONN.—Over 300 employees of Burndy Engineering Co., Inc., recently moved into the firm's newly-completed 48,000 - square - foot administrative headquarters building here.

The building now houses under one roof office employees formerly located in New York and centralizes the personnel and functions of the executive, sales accounting, technical service, research, advertising, development and clerical departments. A major feature of the new building is the vastly expanded quality control and research laboratories.

Minn. Mining & Mfg. Opens Regional Office in Atlanta

ST. PAUL, MINN. — Minnesota Mining & Manufacturing Co. recently opened a new regional sales office and warehouse building in Atlanta, Ga. The new facilities are located at 732 Ashby St., NW.

The new office and warehouse building is similar to facilities opened by the firm within the past year at Buffalo, N. Y.; Dallas, Tex.; and Cleveland, Ohio.

Sterling Plant in Operation

LOS ANGELES — Production has started in the new $2 million plant at Van Wert, Ohio, recently completed by Sterling Electric Motors, Inc., according to an announcement from the company's headquarters here. The new factory is one of the most modern manufacturing plants for the production of gears, splines and gear boxes.

PANAMA VACATIONERS, Mr. and Mrs. Leslie E. Latham, smile for the cameraman in front of the Hotel El Panama. Mr. Latham is president of the electrical wholesaling firm of E. B. Latham & Co., New York City.

Standby Farm Generators Provide Power Insurance

WASHINGTON — Farmers desiring electricity when normal power service to the farm is interrupted should install a standby electric generator that can generate at least 3,000 watts. Agricultural engineers of the U. S. Department of Agriculture and the North Dakota Agricultural College, who during the past year surveyed 97 farmers owning standby generators in the Red River Valley of North Dakota and Minnesota, consider 3,000 watts the minimum power necessary to operate a milking machine, furnace, freezer, water system and a normal number of lamps.

The most economical type of generator, say the engineers, is that operated by a tractor. It eliminates the need of a separate gasoline motor to power the generator. Storage batteries, they say, can't be used in connection with these standby generators as they produce an alternating current.

The survey revealed to the engineers that many of the installations on the 97 farms were fitted with improper switches and fuses, which created hazards to the equipment, the farmer and, in some cases, to the lineman whose job it was to maintain the normal power lines leading into the farm. A double-throw switch which allows use of either high-line or standby generator power—but not both—at one time is essential for a safe installation, say the engineers. When a double-throw switch is properly installed, it is impossible for standby-generated electric power to flow back into the main power lines, which may be under repair.

The engineers also recommended

No. 1

Plugmold

The safe, efficient way to provide closely-spaced, correctly-located outlets for the convenient plug-in anywhere of electrically operated machines and equipment on assembly lines, work benches, inspection tables, in laboratories, engineering departments, offices . . . wherever it is essential to have all the outlets you need when you need them, where you need them

HERE'S THE TRIO!

WHEN YOU PLAN OUTLETS... PLAN ENOUGH OUTLETS... PLAN TO PLUGMOLD IT!

Send today for this new bulletin describing in detail the PLUGMOLD trio

THE WIREMOLD COMPANY
HARTFORD 10, CONN.

THE WIREMOLD COMPANY
HARTFORD 10, CONN., DEPT. E

Please send me a copy of the PLUGMOLD bulletin

Name

Company

Address

City State

THE BEST CRAFTSMEN ALWAYS TAKE PAINE'S...

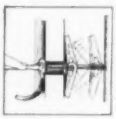
IN NEW BUILDINGS OR OLD...

PAINE
Spring Wing
TOGGLE BOLTS
cut fastening and hanging costs

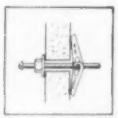
Whether you are building a new home or office or are repairing an old building you'll have no fastening problems if you use Paine Spring Wing Toggle Bolts. Spring Wing Toggle Bolts provide a secure and permanent fastening in hollow walls and ceilings and other hollow spots where it is impossible to reach the other side. They may be used in wood, gypsum, marble, lath and plaster, tile and sheet rock. They are especially useful for installing heavy shelves, partitions, wall mirrors, lights, and plumbing fixtures.

For the big user, try Paine's Toggle Bolt Clamp that grips the bolt when it is to be tightened, so it can be tightened with a screwdriver. It cuts installation time in half and saves the mechanic's fingers. Get Paine Toggle Bolts from your supplier today.

Just drill a hole. Unscrew wing. Put bolt through item to be fastened. Thread wing back on bolt. Push wing through hole.



The wing springs open when through hole. Pull on bolt while tightening to prevent wing turning.



When hanging objects that must be moved periodically, use a nut and washer as shown above.

THE PAINE COMPANY

2979 Carroll Avenue — Chicago 12, Illinois

OTHER PAINE PRODUCTS

Superior Products
BUILDERS SPECIALTIES

Spring Wing Toggle Bolts
Expansion Anchors
"Sudden Depth" Drills
Wood Screw Anchors
Pipe and Conduit Clamps and Straps
Hanger Iron, perforated
Expansion Shells
Star Drills
Malleable Shields
Special Hanging and Fastening Devices

WRITE FOR CATALOG

dual-voltage installations, which can furnish power at 115 and 230 volts. Single-voltage installations do not, they pointed out, provide proper voltage to operate much of the important equipment now being used on farms.

High Notes Help To Salvage Tungsten at Raytheon Plant

WALTHAM, MASS. — Ultrasonics —the sound frequencies which human ears cannot hear—are now being used here by Raytheon Mfg. Co. to conserve materials vital to the nation's defense program. Tungsten is among those valuable alloys being salvaged by means of a new device.

This device, vibrating at a frequency more than three times that of the highest audible pitch, literally shakes glass beads off tungsten rods salvaged from vacuum tubes which have proved faulty during manufacture and which require re-processing. Raytheon developed the revolutionary device, which permits the removal of glass sealed to the tungsten rods ten times faster than was possible by previously-used methods.

The ultrasonic vibrator—oscillating at a rate of 27,000 times per second—sets up a kindred oscillation in the tungsten rod, which throws off the glass like a dog shaking off water. This effect is accomplished by "compressional wave energy" and utilizes the same principle that makes it possible for a singer's high note to shatter a wine glass.

Deadline May 1 for Entries In Sales Managers' Contest

NEW YORK—Sales managers entering the American Home Lighting Institute's nation-wide merchandising competition will have until May 1 to get in their entries. Early tabulations indicate that entries will come from every state. Entrants will be judged on the basis of their success in disseminating information on home lighting to the public, as well as their success in sales techniques.

The total output of the AHLI membership comprises the major part of the nation's lighting fixture output. Through the thousands of wholesale distributors these manufacturers service, and the distributors' sales managers who enter the contest, the members hope to carry to consumers vital information on the importance of good

lighting to family health and comfort, children's development and home decoration.

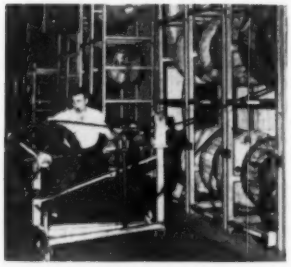
The two first-prize winners—one from a city over 100,000 population and one from a city under 100,000 population—will each receive a cash prize of $1,000, a scroll and an engraved gold watch. They will be guests of the institute at the June, 1952, convention of the group in Atlantic City. Two second prizes of $250 each and 50 honorable mention scrolls will also be awarded.

Entry blanks may be obtained by writing the institute at 130 W. 57th St., New York 19.

Sylvania To Buy N.C. Plant For Making of TV Cabinets

NEW YORK — Sylvania Electric Products Inc. has contracted to purchase the cabinet plant of the Blair Park Furniture Mfg. Co. at High Point, N.C., according to an announcement made by Arthur L. Chapman, vice president and general manager of Sylvania's radio and television division.

The company will produce cabinets for television sets at the High Point plant, and operations will begin as soon as an initial production staff of approximately 200 persons is assembled. The plant, which has 55,000 square feet of floor space, will supply only a portion of Sylvania's cabinet needs.



NEW REEL RACK conserves storage space and makes handling of reels more efficient. The reel is placed in the rack at floor level. U's provided on the cross members locate the reel axle. Reel and rack is then handled as a unit by a lift truck. Construction is of welded square tubing, with self-aligning nesting feet. With each reel free to rotate independently, lengths of material can be dispensed readily as needed. Manufacturer of the new rack is Equipment Mfg., Inc., Hoover Road, Detroit.

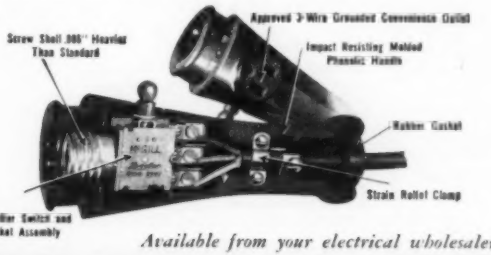
NEW
completely
grounded
portable lighting

McGILL® 5000-G series
3-WIRE
Portable Lamp Guards

Now you can have completely grounded portable lighting that complies with all Underwriters' Laboratories requirements for 3 wire grounded electrical systems in so many modern plants. In addition the new McGill 5000-G Series Lamp Guards offer industry the first fully grounded portable with an Approved 3 wire convenience outlet. Outlet design permits use of parallel blade plug as well as new grounding type with two parallel blades on a U shaped third blade. This provides a connection for grounding drills, saws or other power tools quickly at the working area — without extra extension cords.

The 5025-SLRG model has an impact resisting molded phenolic handle that is positively insulated. It is equipped with a lensed cage for illuminating otherwise inaccessible areas, a built in LEVOLIER switch and 16-3SJT red thermoplastic cord and new 3 blade grounding type plug. Available without cord and closed end cage as 5000-SG.

Select a suitable model at your electrical wholesalers or write for descriptive literature today.


Approved 3-Wire Grounded Convenience Outlet
Screw Shell .005" Heavier Than Standard
Impact Resisting Molded Phenolic Handle
Rubber Gasket
Strain Relief Clamp
Levolier Switch and Socket Assembly

Available from your electrical wholesaler

ONLY McGILL MAKES *Levolier* SWITCHES

McGILL® electrical specialties

McGill Manufacturing Co., Inc., 250 N. Campbell St., Valparaiso, Indiana

Wiring Devices!

THE ANSWER MAY BE . . .

KNOX

No. 599

No. 980

No. 1050

No. 5½

No. 1634

for DOLLAR VALUE

for SERVICE VALUE

for SAFETY VALUE

for REPEAT ORDERS

No. 5009

No. 1988

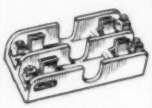
No. 43310

No. 205

KNOX WIRING DEVICES OFFER THE COMPLETE LINE FOR GENERAL INSTALLATIONS

No. 1734-C

No. 1934-C


No. 2965100

The best promotion there is - - the kind money cannot buy - - is yours when you specify **KNOX** Quality Electrical Devices. known for their lasting qualities the world over! All **KNOX** products are backed by more than 30 years of manufacturing experience. They are made in a completely modern plant with the most up-to-date equipment available. High quality standards are rigidly maintained.

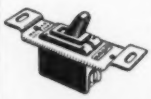
Orders will be filled immediately from stock.

No. 54

No. 1170

● KNOX CATALOG NO. 10 SENT FREE ON REQUEST

No. 593


No. 9751

KNOX PORCELAIN CORPORATION

KNOXVILLE 1, TENNESSEE

Large Ad Campaign to Back Westinghouse Bulb Contest

BLOOMFIELD, N. J.—A $25,000 light bulb contest for consumers and one of the largest advertising and promotional campaigns in the company's lamp history has been announced by the Westinghouse Lamp Division.

More than 500 persons who convincingly argue the case of the well-lighted home will share prizes worth $25,000, including a top cash award of $5,000, in the nation-wide competition starting April 21 and ending June 1.

MANSFIELD, OHIO—More than $12 million in advertising and promoting the sale of electric appliances, a record budget, will be spent by the Westinghouse Electric Appliance Division in 1952.

Square D Safety Switches Meet Federal Specifications

DETROIT—The Square D. Co. has announced that its complete line of safety switches meets recently-adopted federal specifications WS 865. These switches vary in ratings up to 2,400 amperes, 600 volts and 50 horsepower.

Square D's complete line, which includes types A, C and D switches, have been inspected by Underwriters' Laboratories, as well as having met federal specifications WS 865.

Toastmaster Reorganizes And Expands Sales Force

ELGIN, ILL.—The Toastmaster Products Division of McGraw Electric Co., now responsible for the sales of all Manning-Bowman, Everhot and Tropic-Aire appliances, is being reorganized along divisional lines in keeping with these new sales responsibilities, according to an announcement from W. E. O'Brien, general sales manager of Toastmaster.

Tropic-Aire, Inc., a newly-acquired subsidiary of McGraw Electric, purchased the Everhot line from the Swartzbaugh Mfg. Co. in the summer of 1951 and will manufacture both Everhot and Tropic-Aire appliances. For several months, the Toastmaster selling organization has been handling sales of these appliances as well as those made by the Manning-Bowman Division of the company.

Mr. O'Brien said the expansion ac-

tivities now under way by the firm are part of a broad, long-range program to increase the efficiency of the entire selling organization.

The first step in the program was the appointment of five new divisional managers. They are B. F. Parker, eastern divisional manager, with headquarters in New York City; E. B. Thompson, mid-Atlantic division manager, located in Philadelphia; M. J. Ely, east central division manager, with headquarters in Cleveland; F. W. Rexford, central division manager, Chicago; and K. E. Campbell, Pacific division manager, Los Angeles.

Scientific Selling Described At American Steel Meeting

CLEVELAND—"Scientific Selling" was the theme of the two-day sales meeting here recently of sales representatives of U. S. Steel's American Steel & Wire Division. The representatives attended the meeting from all over the country.

H. M. Francis, the division's vice president—sales, described selling as a controllable business science. He declared that planned marketing can synthesize selling into as precise a science as any other segment of a business enterprise, such as accounting, metallurgy, engineering and production.

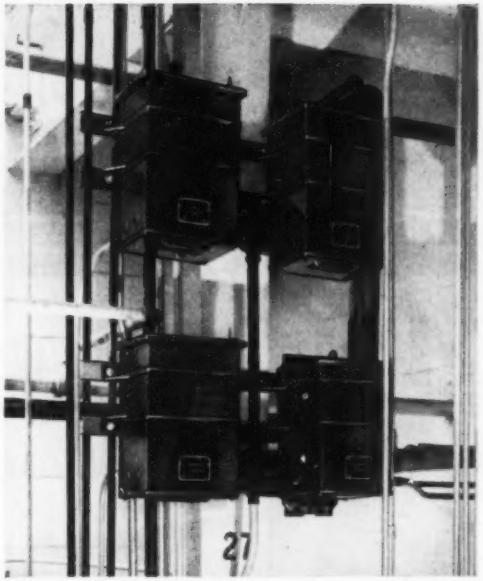
John Graham, the division's general manager of sales, urged members of the sales organization to volunteer their assistance to customers on the matter of interpreting and complying with government regulations.

American Steel & Wire has a staff of 55 persons engaged on a full-time basis, and 381 others on a part-time basis, it was announced, in reading and interpreting the various rulings of the National Production Authority and the Office of Price Stabilization.

Better Light-Sight Bureau Selects a New Chairman

NEW YORK—S. L. Drumm, vice president in charge of sales for New Orleans Public Service, Inc., New Orleans, has been elected chairman of the Better Light Better Sight Bureau. He succeeds Ralph P. Wagner, commercial manager, eastern division, Niagara Mohawk Power Corp., Albany, N. Y., who has been chairman of the board since 1948.

Well known in the electrical industry, Mr. Drumm has served on several committees of the Edison Electric In-



One Jefferson Serves Variety of Voltage Requirements

★ **Connect to 460- or 230-volt line**

★ **Provide 230- or 115-volt secondary current**

Use of Jefferson Transformers permits distribution of higher voltage current — saves copper, conduit, etc. Made in capacities from 50 to 15000 watts.

• Jefferson Air Cooled Power Circuit Transformers, with universal voltage ratio design, reduce the stock required to meet a variety of requirements. Leads are provided for two primary and two secondary voltages.

This feature makes it possible to meet varied requirements with smaller investment. Longer maintenance-free life is another advantage, based on conservative capacity ratings that provide more than adequate safety margins. The ample construction design also reflects quality—large, roomy wiring compartments, handy knockouts for rigid or flexible conduit connections, and sturdy mounting brackets.

Approved by Underwriters' Laboratories, Inc.

JEFFERSON ELECTRIC COMPANY
Bellwood, Illinois
In Canada: Canadian Jefferson Electric Co., Ltd., 384 Pape Ave., Toronto, Ont.

JEFFERSON ELECTRIC

POWER CIRCUIT
TRANSFORMERS
DRY TYPE

FULLMAN Latrobe PRODUCTS

FLOOR BOXES — WIRING SPECIALTIES

FULLMAN MANUFACTURING CO. QUALITY LATROBE SUPREMACY LATROBE, PA.

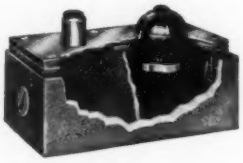
Latrobe Service

Dependable, trouble-free service has always been the chief appeal of "Latrobe" Floor Boxes and Wiring Specialties.

Easy and quick to install, "Latrobe" products serve long and well.

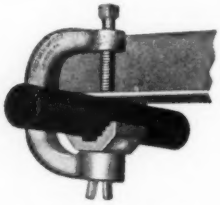
No. 284 Nozzle with No. 200 Cover Plate

This Duplex Receptacle Nozzle is the most useful and efficient on the market. Is furnished with ½" or ¾" brass pipe extension and easily installed.



No. 252-R Two Gang Adjustable Floor Box

Compact and efficient with No. 208 Receptacle in one section. One Cover Plate has ½" Flush Brass Plug; other has 2".



No. 470 "Latrobe" Pipe or Conduit Hanger

Convenient and dependable for hanging pipe or conduit ½", ¾" and 1" to Steel beams up to ⅜" thick. Permits pipe to run at any angle to the beam.

No. 110 "Latrobe" Watertight Floor Box

The neat compact design of the No. 110 Box quickens installation time and makes for smooth, trouble-free service. 208 Receptacle. Cover Plate is 3½" diam.

Keyston Fish Wire

Finest grade, flat steel wire in ten sizes, ranging from lightest work up to heaviest power wiring. 100, 150 and 200 foot coils.

"Bull Dog" Insulator Supports

Safe and sure for clamping porcelain or glass insulators to exposed steel framework. Sizes: 1", 1½", 2", 2½".

FULLMAN MANUFACTURING CO.
LATROBE . . . PENNSYLVANIA

stitute and is the immediate past chairman of the general sales section, Southeastern Electric Exchange.

Mr. Drumm is a native of New Orleans, is active in civic affairs, and is a graduate of the United States Naval Academy.

Radio-TV Makers Donate 50 Sets for RTMA Contest

WASHINGTON—Fifty state and territorial winners of the national Voice of Democracy contest, sponsored by the Radio-Television Manufacturers Assn., received TV and radio-phonograph receivers recently.

Twenty-four receiver manufacturers donated the sets as state prizes for the contest, which was sponsored by RTMA as well as the National Assn. of Radio and Television Broadcasters and the U. S. Junior Chamber of Commerce. State winners in TV reception areas received television sets, while winners in non-TV areas received radio-phonograph combinations.

Ten-Year-Old Fluorescent Lamps Are Still in Operation

PHILADELPHIA — Cold cathode fluorescent lamps, borrowed from actual installations made ten years ago, were recently exhibited here by Colonial Electric Products, Inc., of East Paterson, N. J.

One pair of lamps was loaned by C-O-Two Fire Equipment Co. of Newark, N. J. They burned a total of over 30,000 hours up to the time they were removed, Scott E. Allen, president of the firm, certifies. Another pair of lamps was removed from the plant of H. Disston & Sons, of this city. According to George Van Artsdalen, maintenance superintendent, they were originally put in service in June, 1943, and have been in use continually since then.

Electromode in Rochester Expands Factory Facilities

ROCHESTER, N. Y.—Electromode Corp. has expanded its manufacturing facilities by the addition of a new, one-story building adjacent to its Crouch St. plant here.

The new building, which was formerly a company warehouse, has been entirely remodeled and painted, has a new lighting system, and is heated with Electromode electric suspension-type unit heaters.

Mitchell in Full Production On Line of Air Conditioners

CHICAGO—The Mitchell Mfg. Co. has gone into full production on its complete 1952 line of room air conditioners, it has been announced by E. A. Tracey, vice president in charge of the firm's air conditioning division.

The line consists of seven models with four different cooling capacities—one-third, one-half, three-quarter and one ton. Other model differences are in operating voltages in the three-quarter and one-ton models which are available for 110, 230 and 208 volt operation.

Cornish Cords Pass Tests

NEW YORK—Cornish Wire Co., manufacturer of cords and wire harness assemblies, has announced that the United States Bureau of Mines and the Bureau of Mines Commonwealth of Pennsylvania have registered its type of jacketed cords as having successfully passed flammability tests. The flame-proof cable, identified in sizes of 14-gauge and larger as P-117BM, is now in normal production.

Nicro Makes Life Guarantee

CHICAGO—Nicro Steel Products Co., a division of Cory Corp., has announced a guarantee for life of the stainless steel bowls of all the stainless steel brewers it manufactures. The guarantee covers pitting, rusting, corrosion and discoloring, and applies only to the stainless steel bowls.

ANNUAL SALES meeting was held recently by Walter E. Daw, sales agent of electrical specialties, at Syracuse, N. Y. New York State representatives attending the meeting (shown left to right) were Francis J. Behm, Syracuse; Donald J. Byrne, Rochester; Arthur Peabody, Albany; Mr. Daw; and Frank Nystrom, Buffalo. Displays at the meeting included products from Chase-Shawmut Co., Pyle-National Co., Steel City Electric Co., Edwards & Co., Accurate Mfg. Co., Chelsea Fan & Blower Co., and Kindorf Co.

100,000 Candlepower...
RATED AT ONLY 300 WATTS!

High Intensity
Long Throw
Narrow Beam

DESIGNED TO SAFEGUARD LIFE AND PROPERTY

For outdoor use. The Austin CLD-56 fills the great demand for applications requiring a spot of high intensity, long throw and narrow beam. Particularly adaptable to protective lighting around buildings, shipyards, docks, rail yards, air terminals, along fences, and many other locations where good light is essential to safeguard life, property and operations. Ideal also for a variety of commercial uses — building fronts, recreation areas, church spires, etc.

Designed for use with the new PAR-56, 300 watt, 100,000 candlepower sealed beam lamp. Throws a 21°x37° eliptical beam at 100', 42°x67° beam at 200', etc. Lampholder is engineered to permit lamp's rotation within housing to any fixed position so elipse shaped beam will cover exact area desired. Lampholder is adjustable so light can be beamed in any direction.

Made of lightweight cast aluminum. Weatherproof, completely wired. Stem has ½" tapered thread to fit variety of Austin fittings (a few are illustrated at right). If lamp protection is desirable, lens and lens holder are available at additional cost.

Write for Information and Prices

The M. E. Austin Company
NORTHBROOK, ILLINOIS

GREAT WESTERN and LaMAR LAG FUSES

Can help your customers Win the Fight Against Shortages

From the start, Great Western and LaMar Lag Fuses are designed and built to last longer . . . to give better service. That means fewer fuses used over a given period of time . . . and a definite saving of copper and brass. Here are some superior Great Western and LaMar Lag construction features:

- Rugged materials give better heat dissipation. PROLONGS FUSE LIFE.
- Extra heavy fibre cases and supporting bars give better support to links. PROLONGS FUSE LIFE.
- Both ends can be removed quickly and conveniently Makes cleaning easier. PROLONGS FUSE LIFE.

Tell your customers about these features. Help them beat shortages by getting better and longer fuse service! For full particulars, contact our representative in your vicinity.

The *BEST* fuses money can buy

GREAT WESTERN FUSE DIVISION
Titeflex, Inc., 500 Frelinghuysen Ave., Newark 5, N. J.

National Electric Moves To New $-Million Plant

PITTSBURGH—National Electric Products Corporation has closed its Philadephia warehouse and transferred its operations to the corporation's new million-dollar manufacturing plant recently acquired in Linden, N. J. At the same time, National Electric's Philadelphia sales office was moved from 1234 Hamilton St. to Suite 404-5-6 Architects Building, 17th and Sansom Sts.

The company will still retain its original plant and manufacturing facilities in Ambridge, Pa., as well as its large plant in Torrance, Calif.

Steel City Electric Acquires Kindorf Co., Oakland, Calif.

PITTSBURGH—Steel City Electric Co. has acquired the Kindorf Co., Oakland, Calif.

The Oakland plant will continue to operate under the Kindorf name, and under the supervision of Orlan Kindorf, founder. It manufactures hangers and supports for pipe and conduit and other devices. Steel City specializes in making electrical boxes and conduit fittings.

Dallas Warehouse Opens

DALLAS—To expedite delivery of light bulbs to expanding defense industries in Texas and nearby states, Westinghouse Electric Corp. has opened a new sales and warehouse building here. The red brick structure provides 29,000 square feet of warehouse floor area, space enough for the storage of some nine million light bulbs.

Moe Light Adds New Plant And Warehouse Facilities

FORT ATKINSON, WIS.—Moe Light, Inc., manufacturer of lighting fixtures, with headquarters here, has completed negotiations for an additional manufacturing plant in Princeton, Kentucky.

The plant was formerly occupied by the Kentucky Whip and Collar Co. Moe Light expects to engage the service of some 50 people when it starts operation of the plant, and approximately 250 persons will be employed when production lines are installed. Kim Moe, secretary of Moe Light and son of one of the original founders,

BIG ORDER for electric heaters was recently awarded to Braid Electric Co., Inc., Nashville, Tenn. The order—filling three truckloads and amounting to more than 3,000 heaters—went to Stewart Air Base at Smyrna, Tenn., and is believed to be the largest for electric heaters ever installed in a single project.

will manage the new Princeton plant.

As part of its expansion program, the company has also completed a new building here, which adds 40,000 square feet of production space. All warehousing has been moved to Janesville, Wisconsin, giving the company an additional 35,000 square feet for manufacturing here.

Three Millionth Iron Made

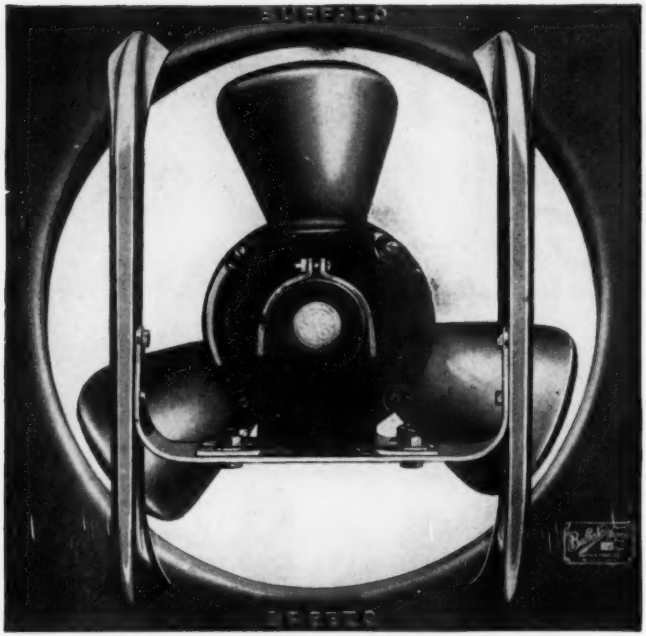
MINNEAPOLIS, MINN.—The three millionth General Mills electric iron recently came off the assembly line. A gold-plated iron, commemorating the event, was accepted by Harry A. Bullis, chairman of the board of directors. Production of the iron began in June, 1946, and it was the first of the company's home appliance line.

New Fluorescent System Gets Higher Levels of Light

CLEVELAND—A lighting system whose slimline fluorescent lamps operate on 360 rather than the conventional 60 cycles has been devised and placed in operation by General Electric illuminating engineers.

Applied first at the U.S. Department of Agriculture's plant industry station at Beltsville, Md., a major benefit is reported from the lighting system in the form of a 40 per cent increase in the amount of light available from the lamps. This is accomplished by operating the fluorescent lamps at a higher current than would be practical at 60 cycles.

The new method also makes possible the substitution of tiny capacitors weighing only a few ounces for the



Square Panel "Buffalo" Breezo Fan for Quick Installation in Walls

TO DO YOUR EXHAUSTING JOBS— AT A GOOD PROFIT!

The "Buffalo" Breezo Fan is one of the most satisfactory to handle. Its first cost is low, therefore it's easy to sell. Installation is inexpensive. And on the job, it's efficient, quiet, durable. WRITE FOR BULLETIN 3222-F. This fan is made in 5 sizes, 8" to 24", all with high grade standard make motors.

"L" BREEZO —a "package" exhaust unit!

- Light, simple to install!
- Motor protected from air stream!
- Efficient exhaust for vapors, fumes, gases!
- 12" to 36" sizes, up to 7300 cfm. at ¼" static.

First For Fans

BUFFALO FORGE COMPANY

214 MORTIMER ST. BUFFALO, NEW YORK

Canadian Blower & Forge Co., Ltd., Kitchener, Ont.

Sales Representatives in All Principal Cities

PANEL BREEZO FANS BELTED VENT SETS BELT-AIR FANS

BREEZ-AIR ATTIC FANS "L" BREEZO FANS "NV" BREEZO FANS

large conventional ballasts weighing several pounds.

Making possible the new lighting system is the design of the new lighting circuit and the development of a new device to convert current to high frequencies.

The lighting circuit involves the use of a "magnetic converter" to step up frequency in much the same manner as a transformer steps up voltage. The lighting installation now is the first in which 60-cycle current is converted to a higher frequency without the use of rotating equipment.

An unusually high level of illumination is needed by government scientists at Beltsville in their investigation of light's effects on plants. By controlling the intensity and duration of light, they are able for the first time to measure precisely its effect on plant cell growth. Studies already made indicate that by controlling the periods of light and darkness, the growth and maturing of plants can be either speeded or retarded.

It is the hope of the Department of Agriculture that the Beltsville studies, by discovering how nature causes plant growth, will bring closer the ultimate goal—learning how to synthesize food.

Chicago Firm to Distribute Circuit Breakers for I-T-E

PHILADELPHIA — I-T-E Circuit Breaker Co. has completed arrangements for the distribution of certain of its products through the Electric Supply Corp., Chicago, and its branch house in Hammond, Ind.

The products to be distributed through Electric Supply Corp. are molded case air circuit breakers, Type ET, with and without enclosures, and individually enclosed large air circuit breakers, Type KA, KB, KC and LG.

Noma Electric Names New Vice Presidents, Treasurer

NEW YORK—Three new vice presidents as well as a treasurer and controller were recently elected by Noma Electric Corp., according to a recent announcement from Henri Sadacca, Noma president.

The new vice presidents are Cecil Dunn, vice president and general manager of the Estate Heatrola Division; Alden P. Lunt, executive vice president of the Ansonia Electrical Division;

Raymond P. Vogele, executive vice president of the K-D Lamp Division. The three will serve in their old posts as well as their new posts. Elected treasurer, as well as controller of the company, was Fred Schwartzstein, who was formerly assistant treasurer and controller.

Four With Ohio Supply Firm For More Than 20 Years

COLUMBUS, OHIO — Four employees of the McCleery-Carpenter Electric Co., 301 N. Third St., recently completed 20 years of service with the electrical wholesaling firm, and another employee completed 25 years.

Those who have been with the company for more than 20 years are Herbert Bauman, Henry Culbertson, Harry Fell and Libby Evans. The 25-year-service mark was passed by Robert Langley.

The McCleery-Carpenter Electric Co. has been operating for the past 31 years. The firm serves an area covering 26 counties in Ohio. It now occupies 25,000 square feet of floor space and has more than 30 employees.

Manufacturers' Rep. Moves

DALLAS, TEXAS—Olson-Robertson Co. has moved from 8220 North Henderson St. to larger quarters at 2104 Irving Blvd. The company, which services electrical wholesalers in this area, has, at the new location, about 3,000 square feet of floor space and 500 square feet of office space. The firm now is prepared to warehouse more material for the 11 eastern companies it represents. Partners in the company are J. E. Olson and J. M. Robertson.

MULTIPLE USES of wall unit won for Fresh'nd-Aire, a division of the Cory Corp., a first prize in the home appliance division of Hess Brothers' recently-concluded versatility in design contest. The unit can be used as a heater, hair dryer, clothes dryer or fan.

TRADE ARRO MARK

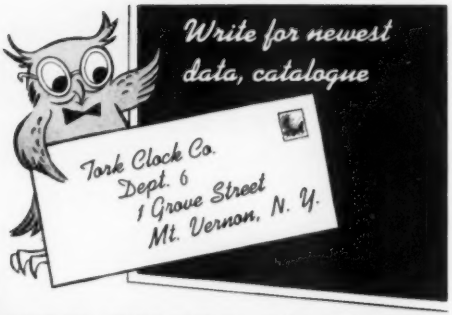
ANCHORING and DRILLING DEVICES

WHEN MAKING *Fastenings* TO MASONRY

SOLD THROUGH DISTRIBUTORS

ARRO EXPANSION BOLT CO.

MARION, OHIO



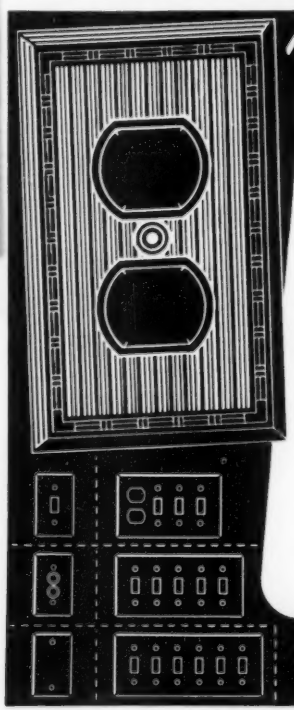
#1 FOR EXTRA PROFITS

Standard in the industry for all-purpose time switch needs. Signs...window lights...pumping...pre-heating... defrosting...oil burners...farm usage. *More than 30 years of specialization!*

TORK TIMERS

TORK CLOCK CO. INC.

ONE GROVE STREET • MOUNT VERNON, N. Y.



No Change in Design!

IMMEDIATE DELIVERIES

on complete line of

MASSEY *"Old Reliable"*
BAKELITE HEAVY DUTY
WALL PLATES

More of this wall plate design is in use than any other style. The demand has always been big . . . and always will. Your greatest profit potential is in supplying MASSEY.

Advantages Galore

- Always uniform.
- Match-up is easier.
- Replacement business awaiting.
- No extra stock to take on.
- One inventory . . . just carry on.
- One complete line . . . from one source.
- Catalog, styles, numbers, etc., remain the same.
- Priced right to sell . . . at big profits.
- Up to 25% heavier.
- Lower in cost.
- Comply with Federal and REA specifications.

Send for catalog and prices today.

A. H. MASSEY, Inc.

300 Longbrook Ave., Stratford, Conn.

Single and Multi-gang Wall Plates and Electric Wiring Devices — Since 1930

People In The News

Robert E. Kocher has been made district manager of Landers, Frary & Clark's electric housewares division in Washington, D. C. Mr. Kocher was formerly connected with the Schick Electric Shaver Co.

Isidore Leviton, president, Leviton Manufacturing Co., Brooklyn, N. Y., was recently honored as a founder of the projected $10,000,000 medical school of Yeshiva University, New York City. Tribute was paid to Mr. Leviton by representatives of city, state and national life at a dinner held in Brooklyn.

William E. Francis has been made manager of information services of the lamp division of Westinghouse Electric Corp. He will supervise informational activities and community and employee relations programs at plants of the lamp division. His headquarters will be located at Bloomfield, N. J.

C. H. Commons, Jr., has joined Illinois Electric Porcelain Co., Macomb, Ill., as manufacturing manager. He was formerly director of ceramic research for the Locke division of General Electric Co., Baltimore.

Lester M. Moss has retired after 41 years of continuous service with the General Electric Co. For the past 19 years, he has served as manager of Nela Press, Nela Park, Cleveland. Walter H. Frick, who has been with G.E. since 1924 and more recently superintendent of Nela Press, replaces Mr. Moss as manager.

Frank W. Wehrheim has been appointed sales manager of the electrical fittings division of Appleton Electric Co., Chicago. An Appleton employee for 31 years, he has spent 25 years in the sales department in various capacities.

Phelps Dodge Copper Products Corp., New York, has made four new appointments within its sales department. Fabian W. Kunzelmann has been named manager of electrical manufacturer sales, Carl D. Dimity is the new manager of utility sales, William K. Dunbar, Jr., is manager of electrical distributor sales, and John C. Williams is the new manager of rod and wire sales.

H. B. Schumaker has been appointed manager of the electrical department of Foster-Thornburg Hardware Co., Huntington, W. Va. Formerly lighting engineer for the firm, he succeeds B. H. Williams, who has resigned to accept a position with the Thomas W. Bullock Co., Louisville, Ky.

Philip Barnes has been made director of the sales division of the Weston Electrical Instrument Corp., Newark, N.J. Formerly sales manager, he has been with Weston for 16 years. The firm also announced the appointment of Hubert M. Ricks as general sales manager, with A. George Koenig continuing as general sales manager of the company's Tagliabue Instruments Division.

John F. Conger is the new manager of the Capehart-Farnsworth Corp.'s Southwest sales region. Formerly manager of the Northwest region for Capehart, his new headquarters will be in Dallas.

F. S. Elfred has been appointed executive vice president of Olin Industries, Inc., New York. Also named by the company to new posts are B. E. Bassett, vice president in charge of production, and M. W. Acker, appointed a vice president.

Hundley R. Gover has been named by the John Oster Mfg. Co. as salesman to service customers in Virginia, North Carolina and South Carolina, with headquarters in Charlotte, N. C. Joseph T. Heyer has been named to a similar post in Arkansas, Louisiana, Mississippi, western Tennessee and western Kentucky, with headquarters in Memphis, Tenn.

C. A. Haines has been made director of facilities planning of the new executive department set up by Sylvania Electric Products Inc. to supervise the planning of plant expansion. Mr. Haines' headquarters will be in Salem, Mass.

Walter L. Longnecker has been named general superintendent of the Cleveland plant of the Cuyahoga Works, American Steel & Wire Division of U. S. Steel Co. He succeeds Nelson W. Dempsey, who recently was appointed assistant manager of operations in the Chicago district. Other appointments at the Cuyahoga

BERNS AIR KING

SURE SIGNS OF BIG SUMMER BUSINESS! The new improved BERNS AIR KING products designed to start a sales heat wave. Everyone is built for extra service . . . styled for added beauty . . . priced for greater value. More big reasons why the complete BERNS AIR KING line is your assurance of profitable selling weather.

new fan profits for you in '52!

rising profit opportunities

DRI-AIRE
Electric Dehumidifier

The dehumidifier market is growing! Now your dealers offer typical BERNS AIR KING quality, style and value in a unit that efficiently dehumidifies 8,000 to 10,000 cubic feet . . . yet requires only 13" x 13" of floor space. Removes 2 to 3 gals. of water every 24 hours. Permanently oiled, hermetically sealed. List, inc. excise tax, only..... **$139.95**

hot sales weather ahead

FAN-MOBILE
powerful—portable—all-purpose

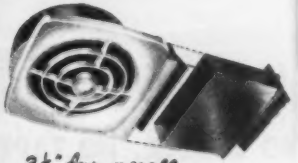
The one fan that does practically everything—helps your dealers sell every prospect! Can be moved from room to room . . . ventilates an entire average home or apartment . . . exhaust or intake. Adjustable in height, 3-speed operation, 16 inch blade and more efficient Ventura design. Handsome Hammertone Grey finish and Chrome trim. List, incl. excise tax, only..... **$69.95**

clear selling advantages

20" PORTABLE
WINDOW VENTILATOR

Extremely popular thin model NOW ELECTRICALLY REVERSIBLE to make it even more sales-appealing! Does a big job of cooling yet can be easily moved from room to room. Installs with just 4 screws, adjustable in width. 20" model with 2 speeds..... **$59.95** list, incl. excise tax

ALSO: ORIGINAL BERNS AIR KING MANUALLY REVERSIBLE WINDOW VENTILATORS that permit adjustment to any position. America's fastest selling models available in 10", 12" and 16" sizes.



3½" deep overall

Blower Type Fan Blade
BUILT-IN KITCHEN FAN

Most improved kitchen fan ever available! Extremely shallow . . . mounts in CEILING OR SIDEWALL. Equipped with blower type pressure blade that maintains constant high air exhaust volume—helps prevent motor burnouts due to clogged ducts. One screw removal of grille.

Fully Automatic, Wall Switch Controlled and Pull Chain models also available in 8-inch and 10-inch sizes priced from **$27.55** list, inc. excise tax.

Write for complete catalog to . . .

BERNS MANUFACTURING CORP.
3050 NORTH ROCKWELL STREET, CHICAGO 18, ILLINOIS

JOBBERS! Add "Flasheat" to your line . . . . . NOW!

HOT WATER . . . . FAST

WITH Flasheat ELECTRIC WATER HEATER

A REAL GOOD AND USEFUL ITEM TO ADD TO YOUR LINE

Weight 1 lb., 2 oz. . . . 110 volt AC or DC current . . . 1320 watts

Produced since 1938. One-year guarantee. Liberal discounts. | Our present jobbers have found steady demand and good profits. You too can share the benefits.

List Price $5.95

Write for Literature

G. L. ELECTRIC CO.

20725 Harper Detroit 24, Mich.

Sold Only Through Jobbers

AUSTIN "SCREW-ON" CONNECTORS

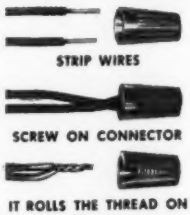
Licensed under United States Letters Patent No. 1,933,555 UL

are faster, safer and neater—

NO SOLDER, NO TAPE, NO ADDITIONAL TOOLS

The Austin Screw-on Connector is a molded phenolic plastic shell with a copper coated spring inserted *after* molding. Provides 25% lower electrical resistance and up to 3 times the tensile strength.

Just strip the wires, insert into connector, and twist. The spring expands and rolls a thread onto copper conductors. When you stop twisting, the spring tightens down and grips conductors firmly. Connector is skirted so insulated portion of wires is drawn up into connector for complete insulation.



Write for Information and Prices

THE M. B. AUSTIN COMPANY
NORTHBROOK, ILLINOIS

Works include Earle L. Chamberlain, division superintendent of the hot mills, succeeding Mr. Longnecker, and William B. Dawson, who replaces Mr. Chamberlain as department superintendent of rolling in the hot mills.

Hans U. Hjermstad has assumed the post of vice president in charge of engineering for Sola Electric Co., Chicago. He has been in charge of engineering development for Sola since 1948, holding the position of assistant to the president.

Louis H. Hopper has been made assistant eastern division manager of BullDog Electric Products Co., Detroit. He was promoted from the position of New York district manager and will make his headquaters in New York City. G. P. Koenig fills Mr. Hopper's former position.

Horace P. Liversidge, chairman of the board of Philadelphia Electric Co., recently received the William Penn award, presented by the Chamber of Commerce of Greater Philadelphia to the "American who has contributed decisively through industry."

E. R. McCoy, for 18 years with the sales department of Joslyn Manufacturing and Supply Co., Chicago, has been appointed sales manager. He is entering his 32nd year in the electrical industry.

Charles F. Meyer has been selected by National Electric Products Corp., Pittsburgh, to be assistant regional manager of its eastern region, and also New York district manager, with headquarters in New York City. He formerly was manager of the firm's busduct department in Pittsburgh.

Harry Roehm has been named domestic products sales manager by Cory Corp., Chicago. Mr. Roehm advanced to the post of domestic products sales manager from his previous post of manager of the company's Midwest division. In Boston, Frank Pollitt has been made the company's New England territory manager.

Edward M. Schindeldecker has been named Pacific southwestern district manager of General Mills' home appliance sales department. He replaces George A. Gillespie who has resigned to enter private business.

MURRAY WHITFIELD has been named executive vice president and sales director of Revere Electric Mfg. Co., Chicago. He has been identified with the manufacture and distribution of electrical equipment and supplies for the past 24 years. Arthur K. Johnson, secretary of the firm, has been named a vice president. He will retain his duties as secretary.

H. H. Rosenheim has recently been named sales manager of International Register Co., Chicago. He was formerly assistant sales manager.

H. K. Schnetter has been appointed administrative assistant to the manager of the eastern district of the Westinghouse lamp division. C. N. Neumann has been named sales promotion representative. Both will make their headquarters at the district office in New York.

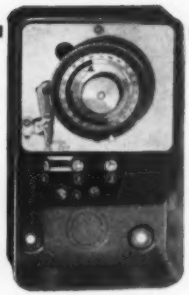
Louis F. Weyand, of Detroit, a vice president and member of the board of Minnesota Mining & Manufacturing Co., St .Paul, Minn., has been promoted to executive vice president of the company. Vice President John A. Borden, general manager of the cellophane tape division, was named sales and marketing consultant for all 3M tapes.

D. A. Brownlie, who joined Unistrut Products Co. last fall, has been appointed western district manager for the firm. He will supervise sales and distribution in California, Arizona, Oregon, Washington, Utah, Nevada and Idaho, as well as Alaska. His headquarters will be in San Francisco.

General Electric has announced major organization changes among the managerial personnel of its lamp division at Nela Park, Cleveland. Fred J. Borch, former manager of sales operations at Nela Park, has assumed special administrative assignments, and Carl L. Olson, former manager of lamp manufacturing, has become manager

YOU MAKE FAST FRIENDS WHEN YOU RECOMMEND AND SELL

PARAGON TIME SWITCHES



Yes, you do your customers a favor and give them the best in service when you stock and sell Paragon Time Switches. Their reputation for built-in quality, precision, accuracy and dependability guarantees maximum satisfaction and minimum trouble.

Available in a wide variety of types and models . . . for indoor or outdoor applications . . . there's a dependable Paragon Time Switch to fit every need . . . backed by Paragon's quality manufacturing — and by a sound, established jobber sales policy.

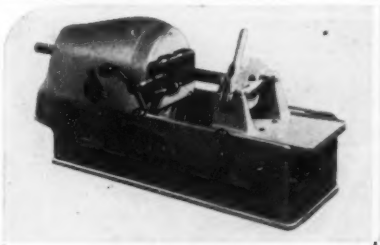
Illustration shows Model 301 straight "ON and OFF" Time Switch for use where two or four operations per day are required. Self-starting, heavy-duty motor, available in 115 or 230 volt, SPST, SPDT and DPST models.

WORLD'S FOREMOST EXCLUSIVE MANUFACTURER of TIME-CONTROL SWITCHES FOR ALL USES

Makers of the Famous "de-frost-it" for Domestic Refrigerators

Paragon ELECTRIC COMPANY

1630 TWELFTH STREET • TWO RIVERS, WISCONSIN



TWO QUIJADA PRODUCTION COST REDUCERS

QUIJADA CHIEF

PIPE AND CONDUIT THREADER

Threads, reams and cuts pipe or conduit faster than any power threader you've ever seen...2" pipe or conduit COMPLETE in just 32 seconds! The only threader with completely automatic chucking. Just a pull of the switch to chuck and a push to un-chuck.

IT'S PORTABLE TOO! Weighs only 160 pounds. Take it right on the job. Use anywhere there is power

E-Z cutter

The only cutter with power driven rollers. Cutter always cutting, never slipping. Easily 500 cuts to a sharpening. The light weight makes a power cutter feasible right on the job. Weighs only 100 pounds — yet easily cuts up to 4 inch pipe or conduit.

SEE YOUR JOBBER OR WRITE FOR MORE INFORMATION TO Dept. EW3

QUIJADA TOOL CO., INC.
5474 Alhambra Avenue
Los Angeles 32, California

For Dependable, High-Pressure Connections
BLACKBURN Hi-Strength CONNECTORS
UL
Mr. Wholesaler:
Here's a line especially designed for you to handle profitably. Each type of connector illustrated is UL approved for a large range of wires so that you will have only a few sizes to stock.
You can be proud to handle the famous BLACKBURN Hi-Strength Line because it is "tops" in quality, and is priced right, too. Send for samples of any of these items and show them to your customers.
JASPER BLACKBURN CORPORATION
35 Madison St. • St. Louis 6, Mo. • CEntral 3007

of engineering. Millard J. Hamner, former manager of engineering, continues as a member of the administrative staff, carrying out general administrative responsibilities outside of the engineering area and other special assignments. Other appointees are Henry F. DeLong, who is the new manager of lamp manufacturing, and William E. Davidson, who is the new manager of sales operation.

J. Oliver West has been named apparatus specialist for the electrical division of LeValley McLeod, Inc., Elmira, N. Y. He was formerly a salesman and sub-office manager in Elmira, Binghamton and Johnson City, N. Y., for Westinghouse Electric Corp.

MANUFACTURERS APPOINT SALES REPRESENTATIVES

Fasco Industries, Inc., Rochester, N. Y., has appointed J. E. Shull and Son, Los Angeles, as its representative in southern California, Arizona and southern Nevada.

The Accurate Mfg. Co., Garfield, N. J., has appointed Charles E. Scholl as its New England sales representative. Mr. Scholl's headquarters will be at 952 Main St., Bridgeport, Conn. The Accurate Co. manufactures friction, rubber and plastic electrical tapes.

Union Insulating Co., Parkersburg, W. Va., has appoined Riecher Electric Sales Co., 8319 Mack Ave., Detroit, as its representative in Michigan and also in Toledo, Ohio.

The M. B. Austin Co., Northbrook, Ill., has named Duizend, Fain & Levin, manufacturers' agent of New Orleans, representative for the wiring products manufacturer in Louisiana, Mississippi, Mobile, Ala., and upper west Florida, including Panama City and Pensacola.

OBITUARIES

R. R. Meeks

R. Ray Meeks, vice president and director of purchasing of Miller Brothers Hardware Co., Richmond, Ind., died suddenly on January 27.

Mr. Meeks had been associated with Miller Brothers Hardware Co. for the past 40 years.

ASSOCIATION NEWS

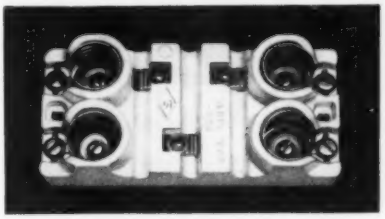
CHICAGO—The National Electronic Distributors Assn. has prepared a four-page brochure outlining the basic structure and functions of electronic parts distributors. Covered in the brochure are sources of supply, material handled, customers served, types of employees, services rendered, status of electronic parts distributors and functions in wartime. George Wedemeyer, of Wedemeyer Electronic Supply Co., Ann Arbor, Mich., and president of NEDA, prepared the copy for the brochure. Copies may be obtained from the NEDA office at 221 North LaSalle St., Chicago 1.

MILWAUKEE—Members of the Electrical League of Milwaukee, at the invitation of Allis-Chalmers Mfg. Co., made an inspection tour of the company's plant here. Following a dinner at the Club House dining room, nearly 300 league members were taken on an escorted tour through the huge mill. Because the program was of a strictly industrial nature, attendance was limited to league members only.

NEW ORLEANS—New officers for the coming year of the Electrical Assn. of New Orleans are Walter J. Barnes, president; J. Rudy Guidroz, executive vice president; James N. Roos, vice president, representing wholesalers, utilities and manufacturers; Hicks L. Youngs, vice president, refrigeration; Edward M. Brignac, vice president, electrical contractors; Joseph M. Sup-

INTERESTED MEMBERS of the New Jersey Chapter of the International Assn. of Electrical Inspectors watch attentively as William D. Bradley of Westinghouse lamp division's headquarters sales department points out main features of lamp. The members held their regular monthly meeting recently at the Bloomfield, N. J., lamp division plant of Westinghouse Electric Corp.

low cost maintenance for high cost circuits



SHAWMUT DIAMOND S CUT-OUTS

Cartridge and Plug Type

Supplied as standard above 30 Amps with Shawmut SHUR-GRIP pressure connectors and spring action fuse clips. Available in Porcelain, Black Molded Composition and Slate, Single, Double and Triple Pole types. Also, 3-wire with 2 branches; Fused and Unfused Neutral; Special Live Front type. Ask for Bulletin #507.

SHAWMUT FUSE TERMINALS

National Electrical Code Standard for front and back panel connections. 250 v or 600 volt sizes. Send for Bulletin #508.

SHAWMUT FUSE CLIPS

National Electrical Code Standard. Two types for either Ferrule or Knife Blade type fuses on either 250 v or 600 volt circuits. See Bulletin #508.

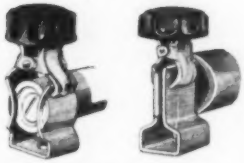
SHAWMUT TESTED FUSE WIRE, RIBBON AND LINKS

Standard for the industry. Wire drawn through jewel dies to insure smoothness and accuracy. Call for Bulletin #509.

SHAWMUT FUSE PULLERS

Made of horn fibre and tested to 35,000 volts. Solid grip jaws and laminated construction prevent slipping and twisting and make them five times stronger than ordinary pullers. Safe and handy for handling any type fuse, clip or plug. Two sizes: Pocket and Giant. Ask for Bulletin #511.

SHAWMUT CLIP LOCK CLAMPS



Hold with a vise-like grip on either straight or round clips. Prevent change of tension, overheating, current waste, shutdowns, etc. Bulletin #511.

Famous for quality since 1893, Chase-Shawmut products set standards for the industry. Count on them for positive protection whenever maintenance is required.

THE CHASE-SHAWMUT CO.
372 MERRIMAC STREET • NEWBURYPORT, MASSACHUSETTS

Amptrap Trion -tS- C-O-T Trimet C-O-T FUSE WIRE

SOLDERING PRODUCTS
WALL
The Safety Line
SINCE 1864

Safer THAN EVER
Better THAN EVER

Pisto Grip
BLOW TORCH

You get added safety and added performance in Wall Blow Torches with the revolutionary new Pisto-Grip handle. Drawn steel tank has brazed inserts and electrically seamed bottom. The Wall blow-proof pump means additional safety. Available in brass or steel. No extra cost for this new handle. It will sell on sight! Write today for complete catalog.

COMPOUND KETTLES • FIREPOTS • OILERS • SAFETY SHIELDS • SOLDERING IRONS
• SOLDERS • OIL CARRIERS • PAINT POTS • ACCESSORIES

WALL MANUFACTURING CO.
Grove City, Pa.

SOLDERING PRODUCTS
WALL
The Safety Line
SINCE 1864

ple, vice president, air conditioning and ventilation; Albert Labiche, vice president, radio and television; W. E. Clement, director of publicity; Eugene H. Mowen, secretary; and I. W. Tufts, treasurer.

WASHINGTON — A ten-week course entitled, "How to Speak Effectively," is being presented by the Electric Institute of Washington. The course, created for electrical appliance salesmen, is designed to teach salesmen how to make more sales through more effective speech. Cost of the course is $15, and the instructor is Professor Edwin Stevens of George Washington University. The course is limited to 30 salesmen.

CLEVELAND — The board of directors of the Electric League of Eastern Ohio recently appointed officers. Named president was C. J. Woodward. W. H. Gruger is the vice president. Miss Jean Fish is the acting secretary and treasurer. The association also named committees for the year.

CHICAGO — Local adequate wiring problems and how best to sell the ad-

count these extras in...

WEAVER

bonded copper ground rods

- Uniform thickness of non-porous Bonded Copper assures lasting corrosion protection.
- Surface of rod completely covered with copper — including both pointed and chamfered ends.
- Bonded copper coating is HARDENED to assure resistance to abrasion in rocky soil.
- Extra high strength steel core provides greater rigidity for easy driving.
- All sizes available for prompt shipment.

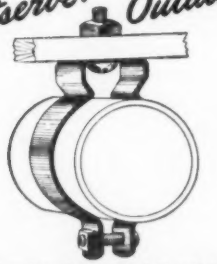
J. A. WEAVER CO.

2110 HOWARD ST. • ST. LOUIS 6, MO. • CEntral 0881

MINERALLAC

Steel HANGERS, CLIPS, STRAPS

Outserve! Outlast!



Minerallac Cable, Conduit and Messenger Hangers are STEEL. Easier, quicker to install; permit speedy, compact wiring; economical. Also in Everdur . . . Porcelain Insulating Bushings available.

• • •

Jiffy STEEL Clips (Pipe-clamp) require only one screw, nail or bolt; rib-strengthened; for hanging pipe, conduit, BX cable, mounting coils, etc. Millions in use.

• • •

Steel Straps for Messenger-cable services on outlet boxes; may be used in conjunction with hangers.

• • •

Order from your Electrical Wholesaler. Send for literature.

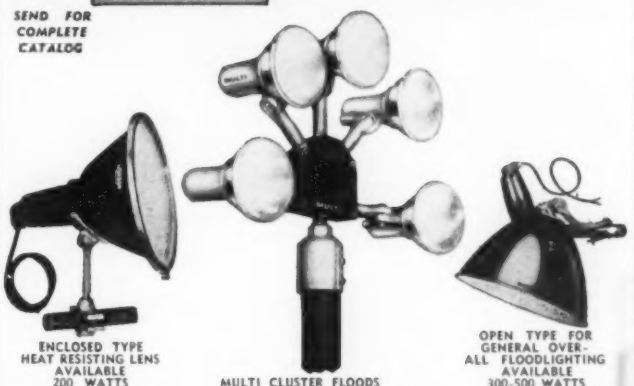
MINERALLAC ELECTRIC COMPANY
25 North Peoria Street Chicago 7, Illinois

vantages of certified wiring to the public was discussed at a one-day conference recently of the Electric Assn.'s adequate wiring committee and utility company representatives who are working directly with the building industry and with home owners. Opening remarks were delivered by A. J. McGivern, Chicago Elec. Wholesalers Association, who with H. C. Moses, Jr., of the Thomas & Betts Co., is co-chairman of the adequate wiring committee. The program included three discussion periods in the morning, followed by a buffet luncheon and three more discussion periods in the afternoon.

ST. PAUL, MINN.—Sixteen electrical trade organizations participated and industry representatives from Minnesota, the two Dakotas, Wisconsin, Iowa and Montana attended the Midwest Electrical Council's annual Electric Industry Convention here recently. The Electrical Trade Exposition, a convention highlight, was again sponsored by the North Central Electrical Mfg. Club. Other highlights of the convention included a seminar on defense production regulations, an all-industry

COMES THE SEASON AGAIN
TO FLOODLIGHT THE PLAYFIELD
GO MULTI FOR THE COMPLETE QUALITY
LINE OF FLOODLIGHTS

SEND FOR COMPLETE CATALOG



ENCLOSED TYPE HEAT RESISTING LENS AVAILABLE
200 WATTS
300-500 WATTS
750-1500 WATTS

MULTI CLUSTER FLOODS FOR SPOTLIGHTING AND SHORT RANGE AREAS

OPEN TYPE FOR GENERAL OVER-ALL FLOODLIGHTING AVAILABLE
300-500 WATTS
750-1500 WATTS

MULTI ELECTRIC MFG. INC.
4223 W. LAKE ST. CHICAGO 24

SOLD ONLY THROUGH RECOGNIZED WHOLESALERS
made by
OKONITE

THIS IS IT!

World-wide recognition for this outstanding line of electric soldering irons—

HEXACON

—specified by the big names for the TOUGH JOBS!

★ MINNEAPOLIS HONEYWELL
★ RADIO CORP. OF AMERICA
★ STROMBERG-CARLSON
★ WESTERN ELECTRIC
★ WESTINGHOUSE
★ EMERSON
★ KAISER
★ BENDIX
★ SPERRY, etc.

PLUG OR SCREW TIPS
40 to 700 Watts
⅛" to 1⅝" Tip Dia.

Follow the leaders and you'll specify HEXACON. They'll efficiently solve your soldering problems. Write for literature.

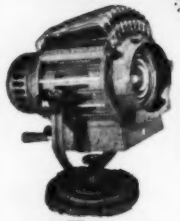
Important news to WHOLESALERS

HEXACON soldering irons are a profitable line for the distributor, dealer and user because it represents one of the most complete lines available today. It is backed by famous users throughout the world, and an aggressive hard-hitting sales promotion campaign is telling the story to a quarter of a million key men in industry each month.

HEXACON ELECTRIC CO.
146 W. CLAY AVE. ROSELLE PARK NEW JERSEY

GoldE

BIGGEST VALUES in DISPLAY LIGHTING



1000 Watt Blower-Cooled Spotlight —

the star value of the GoldE line. Blower-cooled 1000 watt brilliance. Biggest buy for the money because of exclusive features including noiseless effective blower cooling, sturdy construction, heat-proof fresnel lens, non-tip cast iron base. Adjustable beam from flood to spot. Non-tarnishing reflector.

500 watt spot — without blower cooling also available.

500 Watt Rotochrome —

Six beautiful, flowing colors for display lighting. Color wheel rotates, compels attention. A real traffic stopper in windows or on displays. Long life lamp for trouble-free operation.
Pipe clamps and ceiling hanging brackets available. Also diffusers and gelatin filter holders for unusual effect.
Stock and sell outstanding GoldE values for display lighting—no other manufacturer gives you such value-packed, precision engineered, long lasting construction—the result of more than 25 years of know-how!
For complete information and prices write direct to

GoldE Manufacturing Company
DEPT. EW.
1220 W. Madison Street Chicago 1, Ill.

GoldE BRIGHTEST NAME IN LIGHT PROJECTION

The Jiffy Line
SAVES TIME · · TROUBLE AND MONEY
Established 1915
Is Sold by Leading Wholesalers

Jiffy Box Supports are *preformed* to hold box more securely than any other method . . . *at lowest cost.* Quickly installed without screws or nails. Counter display boards available.

Popular with Men on the Job — Profitable for Wholesalers!

•

Jiffy
BAR HANGERS

Straight • Offset • Adjustable
FASTENING DEVICES
1 and 2 Hole Pipe Straps
Staples • Clamps • Strap Iron
OUTLET BOX COVERS
SNAP-IN BLANKS
FISH TAPE • SLIP STICK
ADJUSTABLE HOLE CUTTER
CONDUIT BENDER VISE
SOLDER DIPPER
LINE-UP WASHER
CERAMIC WIRE CONNECTORS
ELEC. DRILL ATTACHMENTS
Saw • Boring Extension

It Pays to Push the Complete *Jiffy* Line.

Write for latest "*Jiffy*" Bulletin EW.

ClydeW. Lint 1144 WEST WASHINGTON BOULEVARD CHICAGO 7, ILLINOIS

luncheon meeting, a wiring codes meeting, an all-industry lighting meeting and an all-industry merchandising meeting.

KANSAS CITY — John D. Hilburn was recently elected president of the Electric Assn. of Kansas City for the coming year. Those who will serve with him as vice presidents are M. A. Havenhill, C. P. Haas, C. E. Barnickel, who represents electrical appliance wholesalers; Fred M. Sholders, representing electrical supply wholesalers; Gale Curtright, J. E. Launder, E. L. Polsinelli, Don Davis and Frank Miles. C. M. Anderson was re-elected secretary-treasurer.

BALTIMORE—New officers recently elected here by the Electrical Manufacturers Representatives Assn., Inc., are T. J. Pugh, president; R. J. Buress, vice president; L. J. Daniels, treasurer; C. L. Walker, secretary; E. S. Barrington and F. A. Leser, executive committee.

CLEVELAND—Howard C. Aley of the Industrial Information Institute, Inc., was the recent speaker at a luncheon meeting of the Electrical League of Eastern Ohio. Mr. Aley, whose talk was sponsored by the Graybar Electric Co., spoke on "America Is Right Here."

CAMDEN, N. J. — Harry Knudson and his associates of Federal Electric Products Co. outlined the advantages of the company's new circuit breaker at a recent meeting of the Electrical League of South Jersey. R. D. Wilder, distribution engineer for Public Service Electric and Gas Co., described and demonstrated the new socket meter installation for general use.

ALLEN

FLUX

FLUX FOR BRAZING SODERING WELDING

L. B. ALLEN CO., Inc.
6701 BRYN MAWR AVE.
CHICAGO 31, ILL.

MORE FACTS ON PRODUCTS

Lighting Maintenance—"The Why, When and How of Modern Lighting Maintenance," a new 12-page, two-color bulletin, has been made available by the lighting division of Sylvania Electric Products Inc., Emporium, Pa. The bulletin stresses planned maintenance of both light sources and reflecting surfaces. It also outlines an eight-step program of planned fluorescent lighting maintenance. Advantages of planned group replacement of lamps as compared to one-at-a-time replacements are discussed.

When writing mention ELECTRICAL WHOLESALING

Farm Equipment—Over 20 pieces of electrical farm equipment that can be easily built from inexpensive materials often found around the farm are described in a new 32-page booklet just issued. The booklet contains easy-to-understand sketches and diagrams illustrating the construction details of signal systems, electric fences, chick and pig brooders, water warmers and ventilating fans. Also included is information on making lamps, trouble lights and electric hotbeds. A copy of the booklet, B-4770-2, may be obtained from Dept. T, Westinghouse Electric Corp., Box 1017, Pittsburgh 30.

When writing mention ELECTRICAL WHOLESALING

Air Conditioning—Engineering bulletin issued by the Buffalo Forge Co. describes the firm's new Model G air conditioning cabinets. Illustrated as well as described are central units now

CONDUIT

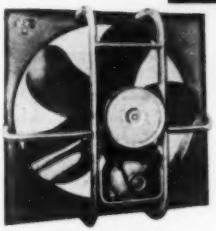
Send for Catalog

CONDUIT NIPPLE MFG CO

1455 SPRING GARDEN AVE., PITTSBURGH 12, PA.

INCREASE your production with efficient—

CHELSEA INDUSTRIAL FANS



TYPE IND EXHAUST FAN

For factories, mills, theatres, schools, hotels etc. Features belt drive with ball bearing motor. Sizes from 24" to 72".

STEP-UP OUTPUT and quality of workmanship, reduce industrial accidents and employee fatigue with proper ventilating and cooling equipment. CHELSEA Fans remove excessive heat, fumes, dirt, dust and grit, also dead stale air. 30 models, in over 200 sizes, are available, and each fan or blower is especially engineered and tested for its recommended application. All ratings are certified by P.F.M.A. test methods to insure proper performance. Check on your ventilating requirements, now.

PROPER VENTILATION IS AN INVESTMENT!

Look for this Seal of ← Certified Ratings

Look for this Symbol ↓ of Quality

WRITE FOR CATALOG NO. 400

Complete data and specifications on fans and blowers for every industrial and commercial application — address requests to Dept. B-3.

CHELSEA FAN & BLOWER CO., Inc.

PLAINFIELD, NEW JERSEY

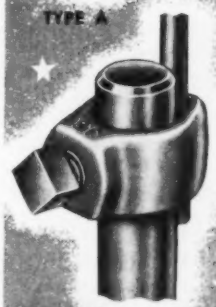
TYPE BB ALL PURPOSE EXHAUST FAN

TYPE PHD PENTHOUSE UNIT

TYPE PLP POWER LINE EXHAUST FAN

TYPE PLDU POWER LINE AIR BLASTER

TYPE A



TYPE B

HIGHER QUALITY AT LOWER COST! with

BLACKBURN *Hi-Strength* Ground Rod Clamps

Mr. Wholesaler:

Here are two low cost Ground Rod Clamps built to the highest quality standards. Type A is for your customers who want the very best. Type B is the "Budget Line", but it is sturdy and strong and will do a good job.

Good volume — high turnover — these are good "bread and butter" items. Write us for samples today.

JASPER BLACKBURN CORPORATION

35 MADISON ST. • ST. LOUIS 6, MO.

Phone CEntral 3987

available in both horizontal and vertical models in sizes from 875 to 22,000 cubic feet of conditioned air per minute. Also included in the bulletin are capacity tables, diagrams, charts and various detail photos to aid in the selection of the proper unit for given conditions. Bulletin is available from the Buffalo Forge Co., 490 Broadway, Buffalo, N. Y.

When writing mention ELECTRICAL WHOLESALING

Educational Aids—Westinghouse has made available a 14-page booklet describing educational aids for power supplier rural programs. The booklet lists free and low-cost materials that can be used by 4-H club members and leaders and vocational agriculture classes in furthering power supplier cooperation with rural youth programs. Illustrated and described in detail are handbooks, charts, leaflets, instruction manuals and fact folders covering all phases of electrical living on the farm and in the home. Sound movies that can be borrowed are also outlined. The booklet, B-5450, can be obtained from School Service, Dept. T, Westinghouse Electric Corp., Box 1017, Pittsburgh 30.

When writing mention ELECTRICAL WHOLESALING

Wire and Cable—Plastic calculator has been designed to help electrical contractors, industrial and power company engineers in their daily work. It shows at a glance the approximate weight per thousand feet of solid and stranded wire and cable with one, two or three conductors. On the reverse side is shown the size of conduit or tubing needed for various numbers of

TITCHENER REX CABLE STAPLES

If... your customers want stronger staples at right prices . . .

If... you want satisfied buyers—steady repeat orders—liberal discounts . . .

Then send for samples, prices and discounts on Titchener's TEMPERED Rex Cable Staples. All types and sizes. Write today.

E. H. TITCHENER & CO.
91 Clinton St. Binghamton, N.Y.
Mfrs. of Staples and Wire Parts for 65 Years

HARRY J. KAHN ELECTRIC SALES CO.
564 W. ADAMS STREET
Chicago 6, Illinois

A Sales Organization Representing Electrical Manufacturers

- 5 SALESMEN COVERING MIDWEST AREA
- WAREHOUSE FACILITIES

CORNISH

The symbol of QUALITY and PERFORMANCE

Flexible Cords

in convenient lengths, on mart metal spools for fast and profitable "footage" business . . . well known to your trade as the choice of leading manufacturers . . . also U-L approved Cord Sets that put an end to CORDelirium.

For exacting uses requiring special resistance to oil, heat and light, our SO and SJO cords are supplied with Neoprene jackets . . . both 40% and 60%.

CORNISH WIRE COMPANY, INC.
50 Church Street, New York 7, N. Y.

Honer

QUALITY SWITCH AND WALL PLATES...
Give You Exactly What You Pay for

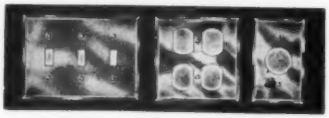
Here is headquarters — make all your purchases from this reliable source, for full satisfaction and economy.

The HONER line is complete. Chrome plates with finish completely protected. Made of Grade A durable steel.

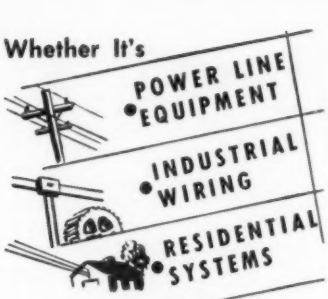
Industry's No. 1 quality plates at competitive prices.

HONER MFG. CO.
The Leading Plate Manufacturer
115 S. Clinton St. • Chicago 6, Ill.

New York Warehouse
126 — 9th Ave., New York 11, N. Y.



Whether It's



make it a

Ⓤ QUALITY job with UNIVERSAL

PORCELAIN INSULATORS

• Whatever your insulator needs, there's a Universal Porcelain Insulator to make every job a quality job.

THE Ⓤ UNIVERSAL CLAY PRODUCTS CO.
1549 EAST FIRST ST.
SANDUSKY, OHIO

conductors when using R, RH, RW, RF 32, RU, RUF, RUW, TF, T, TW, and the lead-covered cables RL and RHL. The user can also find the allowable current-carrying capacities of conductors in amperes. There is a table giving the ampere correction factor for room temperatures over 30 degrees. Available to those in the trade from Triangle Conduit & Cable Co. Inc., New Brunswick, N. J.

When writing mention ELECTRICAL WHOLESALING

Lighting—The Illuminating Engineering Society has announced the publication of the new "I.E.S. Lighting Handbook," a 987-page completely revised second edition. It contains 15 per cent more pages than the 1947 edition, and the technical subject matter has been 75 per cent revised to incorporate into the new volume all of the newest developments in lighting techniques, application and theory. The volume is illustrated with 657 photographs, detail sketches and charts. The handbook sells for $8, and is available from the Illuminating Engineering Society, 1860 Broadway, New York 23.

When writing mention ELECTRICAL WHOLESALING

Instrument Transformers — The 1952 edition of General Electric's "Instrument Transformer Buyer's Guide" has been released by the company's meter and instrument department. The guide, GEA-4626E, contains basic, up-to-date information on the firm's complete line of instrument transformers. Containing 94 pages, the fully-illustrated guide gives ratings, ASA accuracy classifications and prices of all G.E. indoor and outdoor potential and current transformers, metering outfits

AGRESSIVE SALES ORGANIZATION

Covering Illinois, Indiana, Iowa and Wisconsin — and with an associate in Texas, seeks one additional major commercial or industrial line to represent in either or both areas.

Six Salesmen
Chicago Warehouse

Complete, intelligent, efficient and productive coverage.

RA3465 Electrical Wholesaling, 520 N. Michigan Ave., Chicago 11, Ill.

mimms

The line with design features that make dealer sales easy

★ Our most recent leader is our 20" window fan of outstanding design. This three-speed, adjustable panel, super quiet unit is equipped with a sweep back propeller that permits the blades to rotate around the motor instead of in front of it. This unusual design also has ⅛" rubber between the hub that attaches to the motor shaft and the assembly that supports the fan blades. These two improvements are sensational. The sweep back blade permits the fan to be several inches thinner and the rubber insert insulates against sound and vibration. All in all, a remarkably easy fan to sell.

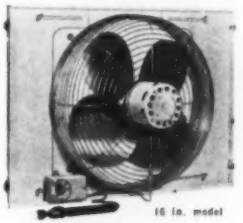
In addition to the three fan leaders featured, we also make an industrial Mancooler, full line of exhaust fans, and an additional window fan of 16" diameter to round out the line and give you added sales.

•

Some selected exclusive Jobbers territories are now open.

•

MIMMS Air Circulators Industrial and Commercial



16 in. model

MIMMS quiet Window Fans

MIMMS Northington Air Circulator

E. N. MIMMS CO.
908 MASON STREET
LOUISVILLE 4, KENTUCKY

KLEIN

Quality you can count on—FOR SAFETY... FOR SERVICE

Yes, safety and service are the two big reasons why Kleins are the choice of the man on the pole. Look for the familiar Klein trade-mark on pliers and climbers, safety straps and belts, lag wrenches and grips. It has been a trade-mark of quality "Since 1857."

ASK YOUR SUPPLIER
Foreign Distributor: International Standard Electric Corp., New York

Write for your free copy of the Klein Pocket Tool Guide today!
"Since 1857"

Mathias KLEIN & Sons
Established 1857 — Chicago Ill. U.S.A.
3200 BELMONT AVE. CHICAGO 18, ILL.

and potential and current portable transformers. Listings of ratio and phase-angle tests, together with tables covering the mechanical and thermal limits of current transformers are also included. Copies are available from the General Electric Co., Schenectady 5, N. Y.

When writing mention ELECTRICAL WHOLESALING

Fans—New six-page catalogue gives complete information on heavy-duty exhaust fans, duct fans, direct drive ring fans and others. Catalogue contains many illustrations and supplies information in chart form on fan dimensions, horsepower, fan speed, free air delivery, and other data. A complete rating table on all fans and propellers is also given in two-color catalogue. For catalogue, write Hamilton Fan & Blower Co., 3202 Beekman St., Cincinnati 23, Ohio.

When writing mention ELECTRICAL WHOLESALING

Wires and Cables — The electrical wire and cable department of United States Rubber Co. has published a 52-page engineering catalogue on its line of electrical wires and cables for the coal mining industry. The booklet contains performance and specification data on insulation and jacket compounds, portable cords and cables with a voltage rating up to 5,000 volts. Also furnished is information on shielded portable cables, welding cables, bore hole cables, mine power cables and miscellaneous mine equipment such as blasing wires, miner's lamp cord and mine telephone cable. Engineering data on splicing and patching, current carrying capacities,

WANTED
Manufacturers Agents for RITE-LITE

America's quality circline fixtures since 1947

Michigan, Indiana, Wisconsin, Virginia, W. Virginia, Iowa, Maryland, Pennsylvania, Ohio, Kentucky, Tennessee, Illinois, Missouri

Standard Rite-Lite Co.
New Brighton, Pa.

HyKon TIME AND LABOR SAVING TOOLS

HYKON WIRE MEASURING UNIT
A complete, compact unit for all wire measuring. Both coils left neat for easy handling. Unit is portable.

HYKON REELIFT
HANDLES YOUR LARGE CABLE REELS WITH EASE.
One man pulls wire and cable from any reel.
Simple leverage easily raises the reel from the floor.
Broken reels are no problem as the reel revolves on an axle.
Model shown lifting small 370 lb. reel.
Write for complete catalog.

HyKon **MFG. CO.**
Box 923 Mt. Union
Alliance, Ohio

BEST SELLER for *RURAL* Installations
HEINEMANN
OUTDOOR SERVICE EQUIPMENT

Neither the hot summer sun nor winter cold affect HEINEMANN Circuit Breakers. That is one reason why they are the best seller for rural installations. Another reason is the variety of models especially suited to the needs of this market.

WRITE FOR BULLETIN 2012.

don't use heat... USE POWER

HEINEMANN ELECTRIC COMPANY
152 PLUM STREET • TRENTON 2, N. J.

Plenty of Slip—

Y-ER EAS

Wire Pulling Lubricant

For Lead, Rubber, Braid or Synthetic Covered Cables

Nothing else gives "slip" to electric cables like Y-Er Eas. This creamy non-corrosive lubricant simplifies cable pulling, especially through saddles and sharp turns.

Y-Er Eas is never harmful to cables or conduit. It performs the slipping function, then dries out and shrinks in volume leaving only a light film of powder.

ONLY Y-ER EAS HAS ALL THESE FEATURES!

- Never messy or greasy to use.
- Never harmful to hands or clothing.
- Prevents sticking and setting of cables.
- Does not run back on cables.
- Facilitates removal of cable at later date.

Write for Descriptive Folder

Improved Y-Er Eas has been tested and approved by the Underwriter's Laboratories, Inc.

At all leading Electrical Supply Houses

ELECTRO COMPOUND CO.
3822 W. 150th Street • Cleveland 11, Ohio

conductor resistance temperature correction factors and formulae for determining amperes are also incorporated in the booklet. Copies can be obtained from R. H. Turner, electrical wire and cable department, United States Rubber Co., Rockefeller Center, New York 20.

When writing mention ELECTRICAL WHOLESALING

Cable, Connector Chart — Prepared especially for busy engineers, salesmen, countermen and order clerks, cable and connector size chart simply and easily shows the correct fitting to use for five different types of wire and cable. The chart comes in handy form and can be conveniently tacked to the wall or slid under desk glass. Copies of the chart may be had by request from The Thomas & Betts Co., Inc., 20 Butler St., Elizabeth, N.J.

When writing mention ELECTRICAL WHOLESALING

Signal Equipment — Hospital and commercial signal equipment is described in a recently-issued 32-page, two-color bulletin issued by Cannon Electric Co. Among the signal equipment items described are visual annunciators, code relays, fire alarm stations, grounding intercouplers, in-and-out registers, isolation transformers, lamp sockets, program bell transfer panels, corridor lights, pull-cord and locking-pushbutton nurses' call systems, silent paging systems and sectional cable terminals. The bulletin, HSE-1, is available from Cannon Electric Advertising Dept., Box 75, Los Angeles, Calif.

When writing mention ELECTRICAL WHOLESALING

"EASY TO FISH"

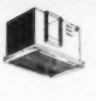
WITH ATLANTIC FISH WIRE

SERVICE ENTRANCE CAP

1819

ATLANTIC CONDUIT FITTINGS CO.
BOSTON, MASS.

TRADE-WIND
CLIPPER VENTILATORS



Ceiling models for kitchen — bath — den — laundry

Cabinet model — ventilates both top-of-stove and ceiling

TRADE-WIND MOTORFANS, INC.
5798 S. Main St., Los Angeles 37, Calif.

NEW *Turn-Tyte* INTERLOCKING DEVICES *by* RODALE

Interlocking, fully interchangeable TURN-TYTE *Cord Connectors, Caps and Receptacles* are your answer to any wire-connection problem. They save you time, money and trouble EVERY TIME!

Turn-Tyte

2-WIRE ARMORED CORD CONNECTOR BODY

Molded bakelite with armored base and cord clamp. Corrosion-resistant coating on bronze contacts.

#2100 — 10-15 amps • #2200 — 20 amps

Turn-Tyte

2-WIRE ARMORED CAP WITH CORD CLAMP

Bakelite with brass blades.

#1026 — 10-15 amps • #1226 — 20 amps

Also Available: 3-Wire, Polarized and Grounded. 10-15 Amps and 20 Amps. IMMEDIATE DELIVERY!

SOLD ONLY THROUGH LEADING WHOLESALERS

For information on how YOU can benefit from this profitable new TURN-TYTE line, write Dept. EW-11 today!

"a TWIST of the WRIST and THEY'RE LOCKED!"

RODALE
MANUFACTURING CO., INC.
EMMAUS PENNSYLVANIA

the NEW FURNAS 10 hp STARTER

Regular enclosure measures 10¾ x 6¼ x 4¼ in.; smaller than No. 2 and larger than No. 1; rated 10 hp., 220-550v AC polyphase.

The new Furnas series YE starter rated 10 hp. maximum, has a smaller, neater case with more than ample space for wiring. Other major features of interest to your starter-customers include:

- **LOW CONTACT-RESISTANT SILVER CONTACTS WITH SPECIAL ARC-QUENCHING PROPERTIES,**
- **TERMINAL BOARDS OF HIGHEST ARC-RESISTANT PLASTIC AVAILABLE,**
- **DUAL VOLTAGE COILS, STANDARD EQUIPMENT ON BOTH SINGLE AND POLYPHASE STARTERS, AND**
- **POSITIVE ACTING, SOLDER-POT TYPE THERMAL OVERLOAD UNITS.**

For a 10 hp. starter or contactor, engineered for better performance and longer life — providing economy of size and price — recommend a Furnas control. Catalogs and price sheets sent on request. Write Furnas Electric Company, 1069 McKee Street, Batavia, Illinois.

OTHER MOTOR CONTROLS — We manufacture other sizes of magnetic starters and contactors as well as drum controllers, pressure and foot operated switches. Details on request.

FURNAS Electric MOTOR CONTROLS

ADVERTISERS' INDEX

Accurate Mfg. Co. 36
Acme Electric Corp. 88
Adam Electric Co., Frank 82
Advance Transformer Co. 105
Advertising Council, The 92
All-Steel Equipment, Inc. 20
Allen Co., Inc., L. B. 158
American Steel & Wire, Division U. S. Steel Co. 4, 5
Amplex Corp. 30
Anaconda Wire & Cable Co. 38
Appleton Electric Co. 32, 35
Arro Expansion Bolt Co. 149
Arrow-Hart & Hegeman Elec. Co., The 94, 107, 108
Atlantic Conduit Fittings Co. 163
Austin Co., The M. B. 145, 152

Berns Mfg. Corp. 151
Blackburn Prod. Corp., Jasper 103, 154, 159
Blackhawk Industries 113
Briegel Method Tool Co. 48
Buffalo Forge Co. 148
BullDog Electric Prod. Co. 25
Bussmann Mfg. Co. Back Cover

Certified Ballast Mfrs. 98
Certified Fleur-O-Lier Mfrs. 95
Champion Lamp Works 22
Chase-Shawmut Co., The 155
Chelsea Fan & Blower Co., Inc. 159
Chester Cable Corp. 15
Clark Controller Co., The 100, 101
Conduit Nipple Mfg. Co., Div. of Pittsburgh Nipple Works, Inc. 159
Conduit Pipe Products Co. 44
Cornish Wire Co. 160
Crescent Ins. Wire & Cable Co. 29
Crouse-Hinds Co. 90, 91
Cutler-Hammer, Inc. 43

Economy Fuse & Mfg. Co. 1
Electrical Construction & Maintenance 96
Electro Compound Co. 163

Federal Elec. Prod. Co. 78, 79
Fullman Mfg. Co. 144
Furnas Elec. Co. 164

G. L. Electric Co. 152
Garden City Plating & Mfg. Co. 24
General Electric Co. Apparatus Dept. 114
General Electric Co. Construction Materials 37
General Electric Co., Cleveland 21
General Switch Corp. 14
GoldE Mfg. Co. 158
Great Western Fuse Div. Titeflex, Inc. 146
Guth Co., The Edwin F. 17

Haartz-Mason, Inc. 84
Hazard Ins. Wire Works Div. 8, 157
Heinemann Elec. Co. 162
Hexacon Electric Co. 157
Honer Mfg. Co. 160
Hykon Mfg. Co. 162

Ilg Elec. Ventilating Co. 104
Illinois Elec. Porcelain Co. 154

Jefferson Electric Co. 143
Jenkins Bros. 102

Kahn Elec. Sales Co., Harry J. 160
Klein & Sons, Mathias 162
Knox Porcelain Corp. 142

Leader Electric Co. Second Cover
Lint, Clyde W. 158

Massey, Inc., A. H. 150
McGill Mfg. Co. 141
Midwest Electric Mfg. Co. 89
Mimms Co., W. N. 161
Minerallac Elec. Co. 156
Minnesota Mining & Mfg. Co. 97
Multi Electric Mfg., Inc. 157
Murray Mfg. Corp. 99

Noma Elec. Corp. 83

Okonite Co. 8, 157

Paine Co., The 140
Paragon Elec. Co. 153
Pass & Seymour, Inc. 131
Plymouth Rubber Co., Inc. Third Cover
Porcelain Products, Inc. 147
Pyle-National Co., The 40
Pyramid Instrument Corp. 93

Quadrangle Mfg. Co. 137
Quijada Tool Co., Inc. 153

RLM Standards, Inc. 6
Revere Electric Mfg. Co. 116
Ridge Tool Co., The 134, 135
Rodale Mfg. Co. 163
Roebling's Sons Co., John A. 86, 87
Rome Cable Corp. 18, 19
Royal Electric Co., Inc. 10
Russell & Stoll Co., Inc. 9

Saturday Evening Post 80
Spang-Chalfant (Div. of The National Supply Co.) 11
Sperti Faraday, Inc. 136
Square D Company 2, 26, 27
Standard Elec. Mfg. Co., Inc. 7
Standard Rite-Lite Co. 162
Steel City Electric Co. 16
Sylvania Electric Prod., Inc. 12, 13, 133

Thomas & Betts Co., The 28
Titchener & Co., E. H. 160
Tork Clock Co., Inc. 150
Trade-Wind Motorfans, Inc. 163
Triangle Conduit & Cable Co., Inc. 31
Trumbull Department General Electric Co. 85

Union Insulating Co. 47
United States Rubber Co. 23, 81
Universal Clay Prod. Co., The 161

Vaco Products Co. 132

Wall Manufacturing Co. 156
Weaver Co., J. A. 156
Western Insulated Wire Co. 138
Wiremold Co., The 139

PACKED INDIVIDUALLY
One 66-ft. roll. ¾" wide in single, pocketsize metal can.

No Better Name Than *Plymouth*

The Finest of Plastic Tapes . . .

PLYMOUTH PLASTIC *Electrical Tape*

RECOMMENDED IN PLACE OF FRICTION AND RUBBER TAPES IN THE FOLLOWING SITUATIONS:

1. Where tape is subject to abrasion.
2. Where space is limited.
3. Where tape is subject to water, acids, alkalies, corrosion, ozone (resists all).
4. Where time must be saved.

ATTRACTIVE COUNTER DISPLAY CARTON
Just fold back the top and it becomes a silent salesman. Contains eighteen 10-ft. rolls, ½" wide.

PACKED CONVENIENTLY
Five 30-ft. rolls, ¾" wide in handy container.

Sold Only Through Recognized Wholesalers

PLYMOUTH RUBBER COMPANY, INC.

Manufacturers of SLIPKNOT — The World's Largest Selling Friction Tape

CANTON, MASSACHUSETTS

How to put fuse business on a "non-skid" basis

Holding business on ordinary "staples" is slippery business. You quote right and it's yours—a penny off and it's gone. You get it today—tomorrow your competitor walks off with it.

But you can get and HOLD fuse business

Show buyers that fuses are not a "staple"—that fuses are not just fuses—some are a lot better than others. Then show buyers the OUTSTANDING ADVANTAGES Fusetron dual-element fuses have over all other fuses.

When a user sees for himself how he can stop waste and loss of time with this modern fuse—how he can keep his motors whirling, machines running and men working better than ever before—it's not going to take him long to make up his mind to standardize on Fusetron dual-element fuses.

A sales presentation in your hands

You already have a briefed up sales presentation right in your binder—it is the bulletin on Fuestron fuses. Sharpen up your sales talk on fuses by glancing through it just before you call on your next fuse prospect. Doing this will help you tie up fuse business on a "non-skid" basis.

BUSSMANN MFG. CO.

St. Louis, Division McGraw Electric Co.

Sell Fusetron fuses for installation throughout the entire electrical system

FUSETRON

TRUSTWORTHY NAMES IN ELECTRICAL PROTECTION

BUSS